RESOLUTION NO. 2014-28

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE CERTIFYING AN ENVIRONMENTAL IMPACT REPORT FOR THE 2013-2021 HOUSING ELEMENT PROJECT PROJECT NO. PL0018

WHEREAS, safe and affordable housing for all persons is a goal of the City of Elk Grove (City); and

WHEREAS the Housing Element of the General Plan provides an opportunity for the City to demonstrate how this goal will be achieved; and

WHEREAS, the City is required by State law to prepare a Housing Element which provides information, policies, and programs to encourage the development of housing to meet the needs of all of the City's residents; and

WHEREAS, the proposed 2014-2021 Housing Element (Project) is located on real property in the incorporated portions of the City of Elk Grove; and

WHEREAS, the California Environmental Quality Act (CEQA, Public Resources Code Section 21000, et seq.), requires local agencies to consider the potential environmental impacts of their decisions prior to taking action; and

WHEREAS, the City determined that the Project was a project requiring review pursuant to CEQA and that an Environmental Impact Report (EIR(be prepared to evaluate the potential environmental effects of the Project; and

WHEREAS, in compliance with Public Resources Code §21080.4, a Notice of Preparation (NOP) was prepared by the City of Elk Grove and was distributed to the State Clearinghouse, Office of Planning and Research, responsible agencies and other interested parties on August 2, 2013 with the comment period ending on September 2, 2013; and,

WHEREAS, on December 16, 2013, the City released a Notice of Availability for the Draft EIR and the 45-day comment period is from December 16, 2013 through January 30, 2014; and,

WHEREAS, the Draft EIR, provided herein as Exhibit A, was filed with the State Clearinghouse (SCH No. 2013082012) and was distributed to public agencies and other interested parties for public review and comment; and,

WHEREAS, the City prepared a Final EIR (provided herein as Exhibit B), which consists of: (1) Draft EIR, (2) an errata to the Draft EIR, (3) comments received on the Draft EIR during the public review period, and (4) responses from the City to comments received.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Elk Grove as follows:

1. **Certification of the Final EIR**

   A. The City Council hereby certifies that the Final EIR has been completed in compliance with the requirements of the California Environmental Quality Act.

   B. The City Council hereby certifies that the Final EIR was presented to the City Council and that the City Council reviewed and considered the information contained in the Final EIR prior to taking action on the Project.

   C. The City Council hereby certifies that the Final EIR reflects the *independent* judgment and analysis of the City Council.

2. **Findings on Impacts**

   The City Council finds that the Final EIR identifies potentially significant impacts that cannot be mitigated to a less than significant level and are thus considered significant and unavoidable. The City Council makes the findings with respect to these significant and unavoidable impacts as set forth in Exhibit C.

3. **Findings on Alternatives**

   The City Council finds that the alternatives analyzed in the Final EIR are rejected because the alternatives would not achieve the project objectives. The City Council makes the finding as set forth in Exhibit C, attached hereto and incorporated herein by reference.

4. **Statement of Overriding Considerations**

   The City Council finds that there are no feasible mitigation measures or Project alternatives that would mitigate or substantially lessen the impacts from the Project. Despite the occurrence of *these significant* effects, however, the City Council chooses to approve the Project because, in its view, the environmental, social, and other benefits of the Project will render the significant effects acceptable as described in Statement of Overriding Considerations as set forth in Exhibit C.

5. **Adoption of the Mitigation Monitoring and Reporting Program**

A. The City Council hereby finds that the proposed mitigation measures described in the SEIR and Findings are feasible, and therefore will become binding upon

the City and on future Applicants. The Mitigation Monitoring and Reporting Program are included as Exhibit D.

B. The City Council hereby adopts the Mitigation Monitoring and Reporting Program, as set forth in Exhibit D, attached hereto and incorporated herein by reference.

6. Other Findings

The City Council finds that issues raised during the public comment period and written comment letters submitted after the close of the public review period of the Draft EIR do not involve any new significant impacts or "significant new information" that would require recirculation of the Draft SEIR pursuant to CEQA Guidelines Section 15088.5.

PASSED AND ADOPTED by the City Council of the City of Elk Grove this 12th day of February 2014.

GARY DAVIS, MAYOR of the
CITY OF ELK GROVE

ATTEST:

JASON LINDGREN, CITY CLERK

APPROVED AS TO FORM:

JONATHAN P. HOBBS,
CITY ATTORNEY

CERTIFICATION
ELK GROVE CITY COUNCIL RESOLUTION NO. 2014-28

STATE OF CALIFORNIA)
COUNTY OF SACRAMENTO) ss
CITY OF ELK GROVE)

I, Jason Lindgren, City Clerk of the City of Elk Grove, California, do hereby certify that the foregoing resolution was duly introduced, approved, and adopted by the City Council of the City of Elk Grove at a regular meeting of said Council held on February 12, 2014 by the following vote:

AYES : COUNCILMEMBERS: Davis, Cooper, Hume, Trigg

NOES: COUNCILMEMBERS: Detrick

ABSTAIN : COUNCILMEMBERS: None

ABSENT: COUNCILMEMBERS: None

Jason Lindgren, City Clerk
City of Elk Grove, California

DRAFT
ENVIRONMENTAL IMPACT REPORT

FOR

ELK GROVE
HOUSING ELEMENT UPDATE

SCH# 2013082012

DECEMBER 2013

Prepared for:

City of Elk Grove
Attn: Sarah Bontrager
8401 Laguna Palms Way
Elk Grove, CA 95758

Prepared by:

De Novo Planning Group
2778 17th Street
Sacramento, CA 95818
www.denovoplanning.com

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

DRAFT
ENVIRONMENTAL IMPACT REPORT

FOR

ELK GROVE
HOUSING ELEMENT UPDATE

SCH# 2013082012

DECEMBER 2013

Prepared for:

City of Elk Grove
Attn: Sarah Bontrager
8401 Laguna Palms Way
Elk Grove, CA 95758

Prepared by:

De Novo Planning Group
2778 17th Street
Sacramento, CA 95818
www.denovoplanning.com

Chapters **Page Numbers**

Tables **Page Numbers**

Figures — Page Numbers

Figures are located at the end of each section.

Appendices

INTRODUCTION

The City of Elk Grove (City) has determined that a program-level Environmental Impact Report (EIR) is required for the proposed Housing Element Update (Project) pursuant to the requirements of the California Environmental Quality Act (CEQA).

The program-level analysis considers the broad environmental effects of the Project. This EIR will be used to evaluate subsequent projects and activities under the Project. This EIR is intended to provide the information and environmental analysis necessary to assist public agency decision-makers in considering approval of the Project. As described in Chapter 1.0, additional environmental review under CEQA may be required for subsequent projects and would be generally based on the subsequent project's consistency with the Project and the analysis in this EIR, as required under CEQA.

PROJECT DESCRIPTION

The following provides a brief summary and overview of the Project. Chapter 2.0 of this EIR includes a detailed description of the Project, including maps and graphics. The reader is referred to Chapter 2.0 for a more complete and thorough description of the components of the Project.

The Project would:

1) Amend the Elk Grove General Plan to update the Housing Element and to revise the Land Use Map for any or all of the sites as described in Table 2.0-1, with the exception of C-12 and C-41 which are addressed through Housing Element actions as described in Chapter 2.0;

2) Amend Elk Grove Municipal Code (EGMC) Title 23, Zoning Code, to revise the Zoning Map to rezone any or all of the sites as described in Table 2.0-1, with the exception of C-12 and C-41 which are addressed through Housing Element actions as described in Chapter 2.0; and

3) Amend EGMC Title 23, Zoning Code, to modify the RD-25 zoning district to adjust the allowed density range from 20.1 to 25.0 dwelling units per acre to 20.1 to 30.0 dwelling units per acre.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This Draft EIR addresses environmental impacts associated with the Project that are known to the City, were raised during the Notice of Preparation (NOP) process, or raised during preparation of the Draft EIR. This Draft EIR discusses potential environmental impacts associated with aesthetics, air quality, biological resources, greenhouse gases and climate change, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, transportation/circulation, and utilities.

The City received 13 written comment letters in response to the NOP and oral comments at the scoping meeting. A copy of each letter is provided in Appendix A of this Draft EIR. A public scoping meeting was held on August 15, 2013 to present the Project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. Scoping comments included:

- Potentially significant impacts to State Route 99 (SR-99) and Interstate 5 (I-5), including the operations of the mainline, interchanges, and nearby ramps of SR-99 and I-5
- Rail corridor safety for housing sites in the vicinity of railroad/light rail right-of-way
- Stonelake sites:
    - Effects on already impacted schools
    - Lack of proximity to commercial/office centers, employment, and public transportation
- Laguna West sites:
    - Public services
    - Transportation/traffic
    - Utilities/service systems
    - Economic and social effects relating to blight and urban decay, including the need for increased police and fire services
    - Aesthetic issues related to large, multi-story high density residential structures in place of retail centers and campus style office parks
- Sheldon Farms: analysis of potential impacts associated with a range of 10 to 15 acres of high density residential development

ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126.6 of the CEQA Guidelines requires an EIR to describe a reasonable range of alternatives to the Project or to the location of the Project which would reduce or avoid significant impacts, and which could feasibly accomplish the basic objectives of the Project. Three alternatives to the proposed Housing Element Update were considered based on the analysis performed to identify the environmental effects of the Project. The alternatives analyzed in this EIR include the following (See Chapter 5.0 for full description and analysis of alternatives):

- **Alternative 1 - No Project Alternative.** Under Alternative 1, the City would not adopt the Housing Element Update. The adopted 2009 Housing Element would continue to be implemented and no changes to the General Plan or Zoning Code would occur.
- **Alternative 2 – Reduced Sites Alternative.** Under Alternative 2, Sites 4 through 7, C-3 through C-11, C-15 through C-17, C-24, C-26, C-28 through C-30, and C-34 through C-40 would be removed from the Project. Specifically, Sites 3 and 6 would each be reduced to 6

acres and each site is anticipated to accommodate a maximum of 150 dwelling units. Site C-22 would be reduced to 8 acres and Site C-23 would be reduced to 12 acres. Sites 2, 3, 7A, C-1, C-2, C-12 through C-14, C-18 through C-21, C-25, C-27, C-31 through C-34, and C-41 would remain as proposed by the Project. See Table 5-1 for a list of Alternative 2 sites, acreages, and capacity. This alternative would result in 206.4 acres of opportunity sites (a reduction of 147 acres in comparison to the Project) with a capacity for 5,164 dwelling units (a reduction of 3,679 dwelling units in comparison to the Project).

- **Alternative 3 – Affordable Housing Overlay Alternative.** Under Alternative 3, an affordable housing overlay would be applied to the 42 alternative sites and high density residential development on these sites would be limited to the amount necessary to accommodate the City's RHNA. For the Project, this amount is 2,954 high density residential dwelling units during the 2013-2021 planning period; the remaining 508 lower income units in the RHNA can be accommodated on existing Sites 1, 8, 9, 10, 11, and 12. Under this alternative, the opportunity sites can be developed under either the site's existing base General Plan and land use designations as shown in Table 2.0-1 or under the Affordable Housing Overlay designation, which would accommodate development of multi-family units at 20.1 to 30.0 units per acre.

The alternatives have been reviewed to determine which alternatives, if any, would be better than the Project. Alternative 1 is the environmentally superior alternative, as it would avoid potential environmental impacts associated with the Project. CEQA requires that when the environmentally superior alternative is the No Project Alternative, that an EIR identify the environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). Alternative 2 is the environmentally superior alternative because it better than the Project and Alternative 3. Table 5-3 in Chapter 5.0, Project Alternatives, summarizes the comparison of the alternatives to the Project for each environmental issue area.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

The environmental impacts of the Project, the level of significance of each impact prior to mitigation, proposed mitigation measures, and the level of significance of each impact after mitigation are summarized in Table ES-1. The reader is referred to Sections 3.1 through 3.12 and 4.0 for the complete analysis of each potential impact.

TABLE ES-1: PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Section 3.1, Aesthetics and Visual Resources			
Impact 3.1-1: The Project has the potential to substantially degrade the existing visual character or quality of the site and its surroundings	S	*None feasible.*	SU
Impact 3.1-2: The Project has the potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area	LS	*None required.*	-
Section 3.2, Air Quality			
Impact 3.2-1: The Project has the potential to conflict with or obstruct implementation of the applicable air quality plan.	LS	*None required.*	-
Impact 3.2-2: The Project has the potential to violate an air quality standard or contribute substantially to an existing or projected air quality violation – Project Operations.	S	*Mitigation Measure 3.2-1: As part of the City's design review and entitlement process, the City shall require subsequent development projects on the opportunity sites to comply with the City's Climate Action Plan and to prepare an Air Quality Mitigation Plan (AQMP) consistent with the requirements of SMAQMD. The AQMP shall include measures to reduce emissions for each subsequent project by 15%, or more if feasible. Measures may include, but are not limited to:* • *Only natural gas burning fireplaces/hearths (i.e. no wood burning*	SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		fireplaces/hearths shall be allowed). • *Only low VOC paint (interior and exterior) and cleaning products shall be used on the individual housing site.* • *Residential dwellings shall be designed to exceed applicable Title 24 energy standards by 20%.* • *Install high efficiency appliances (refrigerator, fans, washers).* • *Streets shall be designed to maximize pedestrian access to transit stops.* • *Provide for on-site road and off-site bus turnouts, passenger benches and shelters as demand and service routes warrant subject to review and approval by local transportation planning agencies.* • *Safe and convenient bicycle and pedestrian paths/sidewalks connecting proposed residential uses to nearby trails, commercial land uses, and services.* • *Ensure that the final design includes:* o *A walkable design/improved pedestrian network (i.e. walkways, paths, sidewalks, trails, etc.).* o *Destination accessibility (connectivity to/from project amenities).* o *Increase transit accessibility (ensure that the minimum distance to a transit/bus facility is .25 miles).*	
Impact 3.2-3: Project construction has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation – Project Construction.	PS	*Mitigation Measure 3.2-2: To reduce construction related emissions, the City shall require the project applicant of the individual housing sites to implement the following SMAQMD Basic Construction Emissions Control Measures:* • *The following practices are considered feasible for controlling fugitive dust from a construction site. Control of fugitive dust is required by SMAQMD Rule 403 and enforced by SMAQMD staff.* o *Water all exposed surfaces two times daily. Exposed surfaces*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. o *Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.* o *Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.* o *Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).* o *All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.* • *The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel powered equipment. The California Air Resources Board enforces the idling limitations.* o *Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.* • *Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*
PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		ensure work and fuel efficiencies. o *Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.* *Mitigation Measure 3.2-3: To reduce construction related emissions, the City shall require the project applicant of the individual housing sites to implement the following SMAQMD Enhanced Emission Control Measures:* • *The project shall provide a plan for approval by the lead agency and SMAQMD demonstrating that the heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The SMAQMD's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.* • *The project representative shall submit to the lead agency and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		rating, engine model year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. The SMAQMD's Model Equipment List can be used to submit this information. • *The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency and SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD, state or federal rules or regulations.* • *If at the time of construction, the SMAQMD has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		the SMAQMD prior to construction will be necessary to make this determination. *Mitigation Measure 3.2-4: To reduce construction related emissions, the City shall require grading activities on the individual opportunity sites to have a maximum daily disturbed area (i.e., grading, excavation, cut and fill) that does not exceed 15 acres.*	
Impact 3.2-4: The Project has the potential to have carbon monoxide hotspot impacts.	LS	*None required.*	-
Impact 3.2-5: The Project has the potential for public exposure to toxic air contaminants.	PS	*Mitigation Measure 3.2-5: As part of the City's design review and entitlement process for Site C-34, the project applicant shall implement one of the following two measures:* *1) Setback all dwelling units and outdoor recreation areas a minimum of 80 feet from the nearest travel lane of SR-99.* 2) *Retain a qualified professional to perform a health risk assessment to determine potential impacts associated with exposure to Toxic Air Contaminants. If Toxic Air Contaminant exposure levels exceed acceptable levels or indicate a significant increase in cancer risk, the health risk assessment shall identify measures that the development project will implement to reduce exposure to acceptable levels. Potential measures include development setbacks (e.g., increased distance from SR-99), setbacks of ground floor units (e.g., use ground floor adjacent SR-99 for parking, storage, office space) if upper floor units are at acceptable exposure levels, indoor air filtration equipment, and disclosure statements to prospective buyers or renters notifying them of predicted health risks and identifying the importance of*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		maintenance of any specialized equipment and keeping windows and doors shut during peak traffic periods).	
Impact 3.2-6: The Project would not create significant sources of objectionable odors.	LS	*None required.*	-
Section 3.3, Biological Resources			
Impact 3.3-1: The Project has the potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	NN/I	*Implement General Plan EIR Mitigation Measures 4.10.1a and 4.10.1b.*	-
Impact 3.3-2: The Project has the potential to have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	NN/I	*Implement General Plan EIR Mitigation Measure 4.10.3.*	-
Impact 3.3-3: The Project has the potential to have a substantial adverse	N/NI	*Implement General Plan EIR Mitigation Measure 4.10.3.*	-

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means			
Impact 3.3-4: The Project has the potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	LS	*Implement General Plan EIR Mitigation Measures 4.10.1a, 4.10.1b, and 4.10.3.*	-
Impact 3.3-5: The Project has the potential to conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	LS	*Implement General Plan EIR Mitigation Measures 4.10.1a and 4.10.1b.*	-
Impact 3.3-6: The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	NI	*None required.*	-

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Section 3.4, Greenhouse Gases and Climate Change			
Impact 3.4-1: The Project may generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	CC/SU	*Mitigation Measure 3.4-1: Prior to the issuance of building permits, housing projects on the opportunity sites shall demonstrate compliance with the Climate Action Plan, including, but not limited to, measures BE-6, BE-7, BE-9, BE-10, RC-1, RC-2, TACM-5, and TACM-9.*	CC/SU
Section 3.5, Hazards and Hazardous Materials			
Impact 3.5-1: The Project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials, or through the release of hazardous materials into the environment, or emit or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	LS	*None required.*	-
Impact 3.5-2: The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	NI	*None required.*	-

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.5-3: Implementation of the Project would not result in impacts from being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.	NI	*None required.*	-
Section 3.6, Hydrology and Water Quality			
Impact 3.6-1: Implementation of the Project would not result water quality impacts associated with erosion, siltation, or pollution, including the potential to violate water quality standards or waste discharge requirements.	LS	*None required.*	-
Impact 3.6.-2: Implementation of the Project would not significantly deplete groundwater supplies nor interfere substantially with groundwater recharge.	LS	*None required.*	-
Impact 3.6-3: Implementation of the Project would not alter the existing drainage pattern in a manner which would result in flooding and would not create or contribute runoff in excess of the capacity of stormwater drainage systems.	LS	*None required.*	-
Impact 3.6.-4 Implementation of the Project would not otherwise substantially	LS	*None required.*	-

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
degrade water quality.			
Impact 3.6.-5: Implementation of the Project would place housing or structures within a 100-year flood hazard area or would impede/redirect flows within a 100-year flood hazard area as mapped on a flood hazard delineation map.	LS	*None required.*	-
Impact 3.6-6: Implementation of the Project would not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a dam.	LS	*None required.*	-
Section 3.7, Land Use			
Impact 3.7-1: Implementation of the proposed Housing Element may conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted to avoid or mitigate an environmental effect.	LS	*None required.*	-
Section 3.8, Noise			
Impact 3.8-1: Potential to result in substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the	LS	*None required.*	-

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
project - traffic noise.			
Impact 3.8-2: Potential to expose persons to, or generate noise levels in excess of applicable standards or to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project - construction noise	PS	*Mitigation Measure 3.8-1:As part of the City's design review and entitlement process, the City shall require the following measures.* *The following measures, when applicable, shall be followed throughout all phases of construction to reduce noise from construction activities and shall be the responsibility of the construction contractor and project applicant:* • *Construction equipment shall be well maintained and used judiciously to be as quiet as practical. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.* • *Use "quiet" models of air compressors and other stationary noise sources where technology exists.* • *Locate stationary noise-generating equipment and construction staging areas as far as feasible from sensitive receptors, including neighboring residential uses, when sensitive receptors adjoin or are near a construction area.* • *Prohibit unnecessary idling of internal combustion engines.* • *Designate a "construction liaison" who shall be responsible for responding to any local complaints about construction noise. The liaison shall determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the liaison at the construction site.* • *Hold a pre-construction meeting with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, construction schedule, and noise coordinator) are completed.*	LS
Impact 3.8-3: Exposure of persons to or	PS	*Mitigation Measure 3.8-2: As part of the City's design review and entitlement process, the City shall require the following measures for construction projects*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
generation of excessive groundborne vibration or groundborne noise levels.		*located less than 25 feet from existing structures:* • *The pre-existing condition of any buildings within 25 feet of any construction activities shall be recorded in order to evaluate damage from project-related construction. Fixtures and finishes within a 25-foot radius of construction activities susceptible to damage shall be documented (photographically and in writing) prior to construction. All damage shall be repaired back to its pre-existing condition.* • *Should damage occur despite the above mitigation measures, construction operations shall be halted and the problem activity shall be identified. A qualified engineer shall establish vibration limits based on soil conditions and the types of buildings in the immediate area. The contractor shall monitor the buildings throughout the remaining construction period and follow all recommendations of the qualified engineer to repair any damage that has occurred to the pre-existing state, and to avoid any further structural damage.*	
Impact 3.8-4: Exposure of persons to, or generation of noise levels in excess of applicable standards.	PS	*Mitigation Measure 3.8-3: As part of the City's design review and entitlement process for housing Sites, the City shall require that sensitive exterior areas associated with future residential uses be located outside of the 60 dBA L_{dn} exterior traffic or railroad noise contour distances. If sensitive receptors are to be located within the 60 dBA L_{dn} exterior noise contour, outdoor activity areas shall be shielded from the noise source using site design measures such as building orientation or sound walls to maintain a 60 dBA L_{dn} (up to 65 dBA L_{dn} conditionally) exterior noise level for noise-sensitive exterior areas.* *Mitigation Measure 3.8-4: As part of the City's design review and entitlement process for housing sites, the City shall require a project applicant*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		to retain a qualified acoustical consultant to participate in the development of the final construction plans to ensure that sensitive residential buildings are designed with appropriate noise-attenuating construction features to maintain an acceptable interior noise level of 45 dBA L_{dn} at those habitable spaces exposed to exterior noise levels exceeding 60 dBA L_{dn} due to transportation noise sources. Feasible methods to achieve acceptable interior noise levels of 45 dBA L_{dn} may include site design techniques (orienting buildings away from significant noise sources, locating windows and doors on building walls that are not adjacent to the noise source, etc.) and/or building design techniques (various Sound Transmission Class (STC) rated sound dampening techniques, such as the installation of STC-rated windows; or employing the use of double-leaf partitions, noise insulation materials and/or resilient wall channels). *Mitigation Measure 3.8-5: As part of the City's design review and entitlement process for the housing element sites, the City shall require the Project Applicant to prepare and distribute a disclosure to all prospective occupants of the project describing the project's proximity to rail lines and the potential for train-related noise, including train warning horns: The disclosure shall specifically note that exterior areas may be exposed to periodic noise from warning horns.* *Mitigation Measure 3.8-6: As part of the City's design review and entitlement process for multi-family sites, the City shall require forced-air mechanical ventilation for units throughout a multi-family residential project so that windows could be kept closed at the occupant's discretion to control interior noise and achieve the interior noise standard of 45 dBA L_{dn}. Closed windows typically provide 25 dBA of noise reduction.* *Mitigation Measure 3.8-7: As part of the City's design review and entitlement process for the housing element sites, the City shall require site design to*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		implement measures to reduce exposure of adjacent uses to noise associated with mechanical equipment and on-site play areas through use of setbacks and/or barriers (e.g., placement of walls, buildings, parapets, or other structures between the noise source and adjacent sensitive receptors) to ensure that mechanical equipment associated with new development on Sites 1, 2, and 5 maintains an exterior noise level of 45 dBA Leq at on- and off-site recreation and yard areas.	
Impact 3.8-5: Potential to expose sensitive receptors to railroad vibrations	LS	*None required.*	-
Impact 3.8-6: Potential to expose persons to, or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies or to result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project	LCC	*None required.*	-
Section 3.9, Population and Housing			
Impact 3.9-1: The Project would not induce substantial population growth.	LS	*None required.*	-
Section 3.10, Public Services and Recreation			
Impact 3.10-1: Project implementation would not have significant effects on	LS	*None required.*	-

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
police facilities.			
Impact 3.10-2: Implementation of the Project would not have a significant effect on fire protection services or facilities.	LS	*None required.*	-
Impact 3.10-3: Implementation of the Project would not have a significant effect on parks and recreational facilities.	LS	*None required.*	-
Impact 3.10-4: Implementation of the Project would not have a significant effect on schools.	LS	*None required.*	-
Impact 3.10-5: Implementation of the Project would not have effects on other public facilities.	LS	*None required.*	-
Section 3.11, Transportation and Circulation			
Impact 3.11-1: The Project has the potential to conflict with an applicable plan, ordinance, or policy establishing acceptable levels of service for the performance of the circulation system.	SU	*None feasible.*	
Impact 3.11-2: The Project would not substantially increase hazards due to a design feature.	LS	*None required.*	-

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

Environmental Impact	*Level of Significance Without Mitigation*	*Mitigation Measure*	*Resulting Level of Significance*
Impact 3.11-3: to the Project would not conflict significantly with adopted policies, plans, or programs regarding bicycle, pedestrian, or transit facilities, or otherwise decrease the performance or safety of such facilities.	LS	*None required.*	-
Section 3.12, Utilities			
Impact 3.12-1: The Project would not exceed wastewater treatment capacity, require the construction of new wastewater treatment facilities, or exceed the requirements of the RWQCB.	LS	*None required.*	-
Impact 3.12-2: Implementation of the Project would not require construction or expansion of water treatment facilities or exceed the available water supply.	LS	*None required.*	-
Impact 3.12-3: Implementation of the Project would not require construction or expansion of stormwater facilities.	LS	*None required.*	-
Impact 3.12-4: Implementation of the Project would not provide substantial additional sources of polluted runoff.	LS	*None required.*	-
Impact 3.12-5: The Project would be served by a landfill with adequate	LS	*None required.*	-

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
capacity and comply with all applicable solid waste regulations.			
Chapter 4.0, Cumulative Impacts			
Impact 4.1: Potential to contribute to the cumulative degradation of the existing visual character of the region.	CC	*None feasible.*	CC/SU
Impact 4.2: Potential to contribute to cumulative impacts on the region's air quality	CC	*Implement Mitigation Measures 3.2-1 through 3.2-5.*	CC/SU
Impact 4.5: The project may contribute to cumulative impacts related to hazards and hazardous materials.	LCC	*None required.*	-
Impact 4.6: The project may contribute to cumulative impacts related to peak stormwater runoff flows or the degradation of water quality.	LCC	*None required.*	-
Impact 4.7: The Project may contribute to cumulative impacts on communities and local land uses.	LCC	*None required.*	-

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 4.8: The Project may contribute to the cumulative exposure of existing and future noise- sensitive land uses or to increased noise resulting from cumulative development	LCC	*None required.*	-
Impact 4.9: The Project may contribute to cumulative impacts on population growth.	LCC	*None required.*	-
Impact 4.10: The Project may contribute to cumulative impacts on public services.	LCC	*None required.*	-
Impact 4.11: The Project may contribute to cumulative impacts on the transportation network.	CC	*None feasible.*	CC/SU
Impact 4.12: The Project may contribute to cumulative impacts on utilities.	LCC	*None required.*	-

CC – cumulatively considerable *LCC – less than cumulatively considerable* *S – significant* *NN/I – no new or increased significance*

PS – potentially significant *LS – less than significant* *SU – significant and unavoidable* *NI – no impact*

The City, as lead agency, determined that the proposed Housing Element Update (Project) is a "project" within the definition of CEQA. CEQA requires the preparation of an EIR prior to the approval of any project that may have a significant impact on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378(a)).

This Draft EIR has been prepared to evaluate the environmental impacts associated with implementation of the Housing Element. This section provides a summary of the Project, describes the purpose and intended uses of the EIR, describes the EIR process, provides an overview of the contents of this Draft EIR, and identifies effects found to not be significant.

1.1 SUMMARY OF THE PROPOSED PROJECT

The Project would:

1) Amend the Elk Grove General Plan to update the Housing Element and to revise the Land Use Map for any or all of the sites as described in Table 2.0-1, with the exception of C-12 and C-41 which are addressed through Housing Element actions as described in Chapter 2.0;

2) Amend EGMC Title 23, Zoning Code, to revise the Zoning Map to rezone any or all of the sites as described in Table 2.0-1, with the exception of C-12 and C-41 which are addressed through Housing Element actions as described in Chapter 2.0; and

3) Amend EGMC Title 23, Zoning Code, to modify the RD-25 zoning district to adjust the allowed density range from 20.1 to 25.0 dwelling units per acre to 20.1 to 30.0 dwelling units per acre.

1.2 PURPOSE AND INTENDED USES OF THE EIR

This Draft EIR has been prepared in compliance with the requirements of CEQA (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An EIR must disclose the expected environmental impacts of a project, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the Project that could reduce or avoid its adverse environmental impacts.

The Housing Element is a component of the City's General Plan and the actions contained therein, including the General Plan and Zoning Code amendments described in Chapter 2.0, are implementation measures of the Housing Element. The Environmental Impact Report (EIR) is intended to serve as a programmatic tiering document for the purposes of CEQA as allowed under Sections 15152, 15168, and 15183 of the CEQA Guidelines. A tiering document front-loads the analysis needed for many projects in order to decrease the time and money that would be needed for individual analyses for each subsequent project.

The City, as the lead agency, has prepared this EIR to provide decision-makers, the public, responsible agencies, and trustee agencies with an objective analysis of the potential environmental impacts resulting from adoption of the Project and subsequent implementation of projects consistent with the Project. The environmental review process enables interested parties to evaluate the Project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the Project. While CEQA requires public agencies to consider, and where feasible, minimize environmental impacts of a Project, CEQA also requires the lead agency to balance adverse environmental effects against other public objectives, including the economic, environmental, and social benefits of a project, in determining whether a project should be approved.

This EIR will be used by the City as a tool in evaluating the environmental impacts of the Project. Please see Chapter 2.0, Project Description, for a description of approvals and subsequent actions associated with the Project.

As the Lead Agency under the provisions of CEQA, the City has discretionary approval authority and the responsibility to consider the environmental effects of the Project. This EIR, in accordance with CEQA Guidelines Section 15126, will serve as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the Project. The City will consider the Draft EIR, comments received on the Draft EIR, and responses to those comments before making a decision regarding the Project.

1.3 TYPE OF EIR

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. The EIR for the Elk Grove General Plan is a Program EIR prepared pursuant to CEQA Guidelines Section 15168, which states:

"A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

1. *Geographically,*
2. *As logical parts in the chain of contemplated actions,*
3. *In connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program, or*
4. *As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways."*

The program-level analysis considers the broad environmental effects of the Project. This EIR will be used to evaluate subsequent projects and activities under the Project. This EIR is intended to provide the information and environmental analysis necessary to assist public agency decision-makers in considering approval of the Project. Additional environmental review under CEQA may be required for subsequent projects and would be generally based on the subsequent project's

consistency with the Project and the analysis in this EIR, as required under CEQA. It may be determined that some future projects or activities under the Project may be exempt from environmental review. When subsequent projects or activities under the Project are proposed, the City will examine the projects or activities to determine whether their effects were adequately analyzed in the Program EIR (CEQA Guidelines Section 15168(c)). If the projects or activities would have no effects beyond those disclosed in this EIR, no further CEQA compliance would be required.

RELATIONSHIP TO THE CITY OF ELK GROVE GENERAL PLAN

The City adopted its General Plan on November 19, 2003, pursuant to Government Code Section 65300. The General Plan acts as the official policy statement of the City and guides public and private development within the City in a manner that maximizes the social and economic benefits for all citizens. In addition, the General Plan also provides policy direction that guides land use development within the City, as well as provides protection for existing natural resources.

Previous environmental review for the project sites was included in the Elk Grove General Plan EIR (State Clearinghouse Number 2002062082.) The EIR analyzed the project sites based on the adopted General Plan land use designations. On November 19, 2003, the City Council approved Resolution 2003-216 certifying the Elk Grove General Plan Final EIR and adopting the associated Findings of Fact regarding environmental effects. A Statement of Overriding Considerations was adopted for the following impacts that were identified as significant and unavoidable:

- Loss of important farmland
- Agriculture/urban interface conflicts
- Cumulative conversion of important farmland and agriculture/urban interface conflicts
- Cumulative conflicts with land use plans or study areas outside the City limits
- Unacceptable levels of service on area roadways during the A.M. and P.M. peak hours
- Unacceptable level of service on State Route 99 northbound and southbound between Eschinger Road and Grant Line Road during the A.M. and P.M. peak hours
- Unacceptable levels of service on area roadways during the A.M. And P.M. peak hours under cumulative conditions
- Temporary noise increases that would exceed the City's noise standards
- Increased traffic noise levels in excess of the City's noise standards
- Cumulative impacts to regional noise attenuation levels
- Increased air quality emissions related to construction activities
- Increased air pollution emissions from operational activities of land uses within the City
- Contribution to cumulative regional air quality impacts
- Increased demand for water supply to the City
- Cumulative increased demand for water supply services

- Direct and indirect impacts on special-status wildlife species and their associated habitats
- Cumulative impacts related to the loss of special-status plant and wildlife species and their associated habitat
- Cumulative wastewater impacts related serving the Urban Study Areas
- Alteration of views
- Cumulative contribution to the conversion of the region's rural landscape to residential, commercial, and other land uses resulting in alteration of visual conditions

This EIR analyzes the potentially significant environmental impacts resulting from Project implementation, including amendment to the adopted General Plan land use designations and concurrent rezones. See Chapter 2.0 for a complete discussion of adopted and proposed land use designations for the sites included in the project.

1.5 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

The term "responsible agency" includes all public agencies other than the Lead Agency that have discretionary approval power over the Project or an aspect of the Project (CEQA Guidelines Section 15381). For the purpose of CEQA, a "trustee agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California (CEQA Guidelines Section 15386). The Housing Element will be submitted to the State Housing and Community Development Department for review and certification. No other responsible agencies or trustee agencies are responsible for approvals associated with adoption of the Project or other actions to support implementation of the Project.

1.6 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for this EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION

The City circulated a NOP of an EIR for the Housing Element on August 2, 2013 to the State Clearinghouse, public agencies, organizations, and the public. A public scoping meeting was held on August 15, 2013 to provide an overview of the Project and to receive comments from interested agencies, organizations, and members of the public regarding the scope of the environmental analysis to be included in the Draft EIR. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and comments provided by interested parties in response to the NOP are presented in Appendix A.

DRAFT EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the Project, description of the environmental setting, identification of the project's direct and indirect impacts on the environment, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes,

growth-inducing impacts, and cumulative impacts. This Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in this EIR. Upon completion of the Draft EIR, the City will file the Notice of Completion (NOC) with the State Clearinghouse to begin the public review period.

PUBLIC NOTICE/PUBLIC REVIEW

Concurrent with the NOC, the City will provide a public notice of availability for the Draft EIR, and invite comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA requirements, the review period for this Draft EIR is forty-five (45) days. All comments or questions regarding the Draft EIR should be addressed to:

City of Elk Grove
Planning Department
c/o Sarah Bontrager, Housing Program Manager
8401 Laguna Palms Way
Elk Grove, CA 95758

Email: sbontrager@elkgrovecity.org

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete", the City Council may certify the Final EIR in accordance with CEQA. As set forth by CEQA Guidelines Section 15151, the standards of adequacy require an EIR to provide a sufficient degree of analysis to allow decisions to be made regarding the Project that intelligently take account of environmental consequences.

Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or reject the project. A decision to approve the Project, for which this EIR identifies significant environmental effects, must be accompanied by written findings in accordance with State CEQA Guidelines Section 15091 and if applicable, 15093. A Mitigation Monitoring Program, as described below, would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. This Mitigation Monitoring Program will be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the Final EIR.

1.7 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an

environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. Discussion of the environmental issues addressed in the Draft EIR was established through review of environmental and planning documentation developed for the Project, environmental and planning documentation prepared for recent projects located within the City and responses to the NOP.

This Draft EIR is organized in the following manner:

EXECUTIVE SUMMARY

The Executive Summary summarizes the characteristics of the Project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the project's environmental impacts and possible mitigation measures. This chapter identifies alternatives that reduce or avoid at least one significant environmental effect of the Project.

CHAPTER 1.0 – INTRODUCTION

Chapter 1.0 briefly describes the Project, the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, identifies the scope and organization of the Draft EIR, and summarizes comments received on the NOP.

CHAPTER 2.0 – PROJECT DESCRIPTION

Chapter 2.0 provides a detailed description of the Project, including the location, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, subsequent projects and activities, and a list of related agency action requirements.

CHAPTER 3.0 - ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Chapter 3.0 contains an analysis of environmental topic areas as identified below. Each subchapter addressing a topical area is organized as follows:

Environmental Setting. A description of the existing environment as it pertains to the topical area.

Regulatory Setting. A description of the regulatory environment that may be applicable to the Project.

Impacts and Mitigation Measures. Identification of the thresholds of significance by which impacts are determined, a description of project-related impacts associated with the environmental topic, identification of appropriate mitigation measures, and a conclusion as to the significance of each impact.

The following environmental topics are addressed in this section:

- Aesthetics
- Air Quality
- Biological Resources
- Land Use/Planning
- Noise
- Population/Housing

- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology/Water Quality
- Public Services/Recreation
- Transportation and Circulation
- Utilities/Service Systems

CHAPTER 4.0 – OTHER CEQA-REQUIRED TOPICS

Chapter 4.0 evaluates and describes the following CEQA required topics: impacts considered less-than-significant, significant and irreversible impacts, growth-inducing effects, cumulative, and significant and unavoidable environmental effects.

CHAPTER 5.0 - ALTERNATIVES TO THE PROJECT

Chapter 5.0 provides a comparative analysis between the merits of the Project and the selected alternatives. State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the Project, which could feasibly attain the basic objectives of the project and avoid and/or lessen any significant environmental effects of the Project.

CHAPTER 6 - REPORT PREPARERS

Chapter 6.0 lists all authors and agencies that assisted in the preparation of the Draft EIR, by name, title, and company or agency affiliation.

APPENDICES

This section includes all notices and other procedural documents pertinent to the Draft EIR, as well as technical material prepared to support the analysis.

1.8 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City received 13 written comment letters in response to the NOP and oral comments at the scoping meeting. The comment letters are provided in Appendix A of this Draft EIR and the comments addressing issues that were received in response to the NOP are summarized below.

- Potentially significant impacts to SR-99 and I-5, including the operations of the mainline, interchanges, and nearby ramps of SR-99 and I-5
- Rail corridor safety for housing sites in the vicinity of railroad/light rail right-of-way
- Stonelake sites:
  - Effects on already impacted schools
  - Lack of proximity to commercial/office centers, employment, and public transportation
- Laguna West sites:
  - Public services
  - Transportation/traffic
  - Utilities/service systems

- Economic and social effects relating to blight and urban decay, including the need for increased police and fire services
- Aesthetic issues related to large, multi-story high density residential structures in place of retail centers and campus style office parks

- Sheldon Farms: analysis of potential impacts associated with a range of 10 to 15 acres of high density residential development

1.8 TERMINOLOGY USED IN THIS EIR

This Draft EIR uses the following terminology, as described in Article 20 of the State CEQA Guidelines:

"Project" means the whole of an action, which has the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

"Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

"Environment" means the physical conditions that exist within the area which will be affected by a Project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved shall be the area in which significant effects would occur either directly or indirectly as a result of the project. The "environment" includes both natural and man-made conditions.

"Effects" and "impacts" as used in this document are synonymous. Effects analyzed under CEQA must be related to a physical change. Effects include:

- direct or primary effects that are caused by the project and occur at the same time and place, and
- indirect or secondary effects that are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

"Mitigation" includes:

- avoiding the impact altogether by not taking a certain action or parts of an action;
- minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;
- reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or

- compensating for the impact by replacing or providing substitute resources or environments.

"Cumulative impacts" refers to two or more individual effects that, when considered together, are

- considerable or which compound or increase other environmental impacts:
- The individual effects may be changes resulting from a single project or a number of separate projects.
- The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

This Draft EIR uses a variety of terms to describe the level of significance of environmental impacts identified during the course of the environmental analysis. These terms are defined below.

- A "less-than-significant impact" is an impact that is adverse but that does not exceed the defined standards of significance. Less-than-significant impacts do not require mitigation.
- A "potentially significant impact" is an impact for which there is not enough information to make a finding of less-than-significant impact; however, for the purpose of this Draft EIR, the impact is considered significant. A potentially significant impact is equivalent to a significant impact and requires the identification of feasible mitigation measures or alternatives.
- A "significant impact" is an impact that exceeds the defined standards of significance and would or could cause a substantial adverse change in the environment. Mitigation measures are recommended to eliminate the impact or reduce it to a less-than-significant level.
- A "significant and unavoidable impact" is an impact that exceeds the defined standards of significance and that cannot be eliminated or reduced to a less-than-significant level through the implementation of mitigation measures.
- "No Impact" indicates that the project would not have an adverse effect to the environment, either because the threshold of significance does not apply to the project or based on project-specific factors.
- A "cumulatively considerable" contribution to an impact means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
- A "less than cumulatively considerable" contribution to an impact means that the incremental effects of an individual project are not significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

This page left intentionally blank.

The proposed Housing Element Update (Housing Element Update or Project) would: 1) amend the City of Elk Grove General Plan (General Plan) to update the Housing Element, 2) amend the General Plan land use designations and zoning designations for up to 42 sites in the City, and 3) amend EGMC Title 23, Zoning Code, to modify the RD-25 zoning district.

2.1 PROJECT LOCATION AND SETTING

The City of Elk Grove encompasses approximately 26,980 acres within Sacramento County. See Figure 2.0-1 for project location. The City of Elk Grove is located within the USGS 7.5 minute Bruceville, Buffalo Creek, Carmichael, Clarksburg, Courtland, Elk Grove, Florin, Galt, and Sloughhouse quadrangles. Elevations within the City of Elk Grove range from sea level to approximately 150 feet above mean sea level (MSL). Plant communities within the City of Elk Grove include agricultural cropland, annual grassland, fallow agricultural land, horticultural/landscape, irrigation ditches, irrigated pastures, open waters, perennial and seasonal marshes, riparian woodlands, seasonal wetlands, and vernal pools. Land uses throughout the City of Elk Grove vary, including urban, rural, and open space uses. Urban land uses in the City generally consist of residential, commercial, office, recreational, and public uses.

Natural features in the area include the Stone Lakes National Wildlife Refuge, the Cosumnes River, the Sacramento River and associated tributaries (e.g., Elk Grove Creek, Deer Creek, Laguna Creek, Morrison Creek, and Whitehouse Creek), and vegetation communities consisting of valley oak woodland, annual grassland, valley foothill riparian, and agricultural lands.

2.2 PROJECT BACKGROUND AND HISTORY

State law requires each city and county to adopt a general plan containing at least seven elements including a housing element. The housing element, required to be updated regularly, is subject to detailed statutory requirements and mandatory review by the State Department of Housing and Community Development (HCD). This Housing Element project is an update of the City's previous housing element, which was adopted by the Elk Grove City Council on July 22, 2009 and certified by HCD on September 5, 2009.

Housing element law requires local governments to plan adequately to accommodate their existing and projected housing needs, including their share of the regional housing need.[1] Housing element law is the State's primary market-based strategy to increase housing supply, choice, and affordability. The law recognizes that in order for the private for-profit and non-profit sectors to adequately address housing needs and demand, local governments must adopt land use plans and regulatory requirements that provide opportunities for, and do not unduly constrain, housing development.

[1] Housing element law is codified in California Government Code Sections 65580-65589.8 available at: http://www.leginfo.ca.gov/calaw.html.

The Project applies to housing development in the City of Elk Grove. The Project identifies land use changes to up to 42 sites to accommodate housing growth (see Figure 2.0-3), as described below under Housing Sites.

2.3 PROJECT OBJECTIVES

The purpose of the Project is to address the housing needs and objectives of the City and to meet the requirements of State law. The Project includes the following goals and objectives:

Housing Element Goals

- Housing Goal 1: Provide adequate sites to accommodate the City's share of regional housing needs through appropriate zoning and development standards.
- Housing Goal 2: Assist in the development and provision of adequate housing stock to meet the needs of extremely low-, very low-, low-, and moderate-income households and special needs groups.
- Housing Goal 3: Identify and, where appropriate, remove governmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and special needs groups.
- Housing Goal 4: Conserve and improve the condition of existing affordable housing stock.
- Housing Goal 5: Promote housing opportunities for all persons, regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.
- Housing Goal 6: Preserve assisted (subsidized) housing developments for lower-income households.

Housing Element Objectives

- Maintain and enhance existing housing and blend well-designed new housing into existing neighborhoods.
- Use land efficiently to meet housing needs, minimize environmental impacts and maximize opportunities to use alternative transportation modes *such as transit*, bicycling and walking.
- Provide housing for special needs populations that is coordinated with support services.
- Build local government institutional capacity and monitor accomplishments to respond to housing needs effectively.
- Provide adequate sites to accommodate the City's long-term housing needs, with a buffer of high-density sites provided to acknowledge that some of the high density sites may be developed with market rate housing or other non-affordable housing uses and to ensure flexibility in future land use planning decisions.

- Accommodate high density housing consistent with the requirements of the Government Code, including Section 65583.2(c)(3)(B)(iv).
- Adopt a housing element meeting the requirements for certification by HCD.

2.4 PROJECT CHARACTERISTICS

This Draft EIR evaluates the potential environmental impacts associated with the adoption and implementation of the Project, including 1) amendment of the General Plan to update the Housing Element, 2) amendment of the General Plan land use designations and zoning designations for up to 42 sites in the City, and 3) amendment to EGMC Title 23, Zoning Code, to modify the RD-25 zoning district.

Housing Element

The Housing Element has been prepared to respond to current and near-term future housing needs in Elk Grove, as assigned through the state's Regional Housing Needs Allocation (RHNA) process and identified in the Housing Needs Analysis presented in the Housing Element. The Housing Element contains updated information and strategic directions, including policies and specific actions, that the City is committed to undertaking to address its housing needs. A full copy of the City's proposed Housing Element may be accessed at:

http://www. egplanning.org/housing/housing-element.asp.

The Housing Element includes the following components, consistent with the requirement of Government Code Section 65583:

- A review of the previous element's goals, policies, programs, and objectives to ascertain the effectiveness of each of these components, as well as the overall effectiveness of the Housing Element.
- An assessment of housing needs and an inventory of resources and constraints related to the meeting of these needs.
- An analysis and program for preserving assisted housing developments.
- A statement of community goals, quantified objectives, and policies relative to the preservation, improvement, and development of housing.
- A program which sets forth a schedule of actions that the City is undertaking or intends to undertake, in implementing the policies set forth in the Housing Element to identify adequate sites to accommodate the housing needs of all economic segments of the community. The program must do all of the following:
    - Identify actions that will be taken to make adequate sites available to accommodate the City's share of the regional housing need, if the need could not be accommodated by the existing inventory of residential sites;
    - Assist in the development of adequate housing to meet the needs of extremely low, very low, low, and moderate income households;

- Address and, where appropriate, remove governmental constraints to the maintenance, improvement, and development of housing;
- Conserve and improve the condition of the existing affordable housing stock;
- Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability; and
- Preserve assisted housing developments for lower income households.

The 2013 Housing Element Update focuses on revisions to the adopted Housing Element that are necessary to comply with changes to State law and that are needed to reflect changes that have occurred since adoption of the current Housing Element in 2009. These changes include updated demographic information, updated housing needs data, updated analysis of the availability of housing sites to meet the City's needs, and an updated Housing Program to establish goals, policies, and actions to address the City's housing needs. The Housing Element map of available housing sites will be updated to identify adequate sites to accommodate the City's 2013-2021 RHNA and the City will concurrently amend the General Plan Land Use Map and Zoning Map to accommodate the housing sites. Table 2.0-1 lists 42 sites in the City which may require either a General Plan land use designation change or zoning change or both.

HOUSING ELEMENT POLICIES AND ACTIONS

The Housing Element identifies policies and actions to assist the City in meeting its housing goals. The policies and actions address six topic areas:

1. Provide Adequate Sites: Policies *H-1* through *H-3*, Actions *H-1 Action 1* through *H-3 Action 2*.
2. Assist in Development of Affordable Housing Stock: Policies *H-4* through *H-8*, Actions *H-4 Action 1* through *H-8 Action 2*.
3. Removal of Governmental Constraints: Policies *H-9* through *H-12*, Actions *H-9 Action 1* through *H-12 Action 1*.
4. Conserve and Improve Affordable Housing Stock: Policies *H-13* through *H-15*, Actions *H-13 Action 1* through *H-15 Action 1*.
5. Housing Opportunities for All Persons: Policy *H-16*, Actions *H-16 Actions 1* and *2*.
6. Preserve Assisted Housing: Policy *H-17*, Actions *H-17 Actions 1* through *3*.

HOUSING PROGRAM

Chapter 1 of the Housing Element establishes the City's housing program, which includes goals, policies, and actions to address the City's housing needs. The City's Housing Goals are described above Project Objectives. The policies support achievement of the Housing Goals. The actions established in Chapter 1 are specific steps that the City will take to address its housing needs. These actions are identified below. The majority of actions in the Housing Element commit the City

to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. The actions included in the Housing Element would not change the potential location of development, increase the intensity of development, or result in development that is not consistent with the growth allowed under the City's General Plan. However, the changes in land use designations and rezoning described below under Housing Sites will result in land use changes that could have an effect on the environment.

H-1 Action 1: To the extent that there are high-density residential sites identified as accommodating the City's RHNA that ultimately develop with a use other than high-density residential development, the City will ensure that it maintains adequate inventory to accommodate the RHNA, including by rezoning as necessary.

H-1 Action 2: The City shall rezone approximately 60 acres of the Southeast Policy Area (aka Meridian) to meet a portion of the City's lower-income housing needs. All rezoned sites will permit owner-occupied and rental multifamily developments by right and will not require a conditional use permit or any other discretionary review. All sites will accommodate a minimum of 20 units per acre and at least 16 units per site, pursuant to State law requirements.

H-2 Action 1: Continue to allow corner duplexes in single-family residential developments without a use permit.

H-3 Action 1: Continue to encourage multifamily development throughout the City. Utilize the following non-binding guidelines in the analysis process of identifying opportunity locations for new multifamily housing:

(a) Proximity to public transit or bus service.

(b) Proximity to commercial and social services.

(c) Parcel size and configuration that enhances the feasibility of development.

(d) Lack of physical constraints (e.g., noise, wetlands).

(e) Provision for a variety of housing types and affordable housing opportunities.

(f) Of an appropriate size to provide for on-site management of the facility.

(g) Integration into and compatibility with surrounding development.

(h) Proximity to other multifamily development.

The City may also consider other criteria, as it deems appropriate, in order to determine the feasibility and potential constraints of new multifamily development.

H-3 Action 2: Offer fast track/priority processing, density bonuses, flexibility in development standards, and fee subsidies (when feasible) to developers proposing new housing, mixed-use, or infill projects affordable to lower-income households, farmworkers, seniors, and other special needs groups.

H-4 Action 1: Continue to support affordable housing development through financial assistance from sources such as the Affordable Housing Fund, Community Development Block Grant (CDBG), HOME, and US Department of Housing and Urban Development (HUD) or California Department of Housing and Community Development (HCD) funding, as feasible.

H-4 Action 2: When feasible, continue to provide waivers of or exemptions from select fees to all affordable housing projects and participate in the Sacramento Regional County Sanitation District's fee waiver and deferral program to reduce impact fees for affordable housing development.

H-4 Action 3: Offer affordable housing funding sources through the issuance of a Request for Proposals process consistent with the City's Affordable Housing Loan Program guidelines, or other process as approved by the City Council.

H-5 Action 1: Continue to apply for HOME and CalHome funds for homebuyer assistance programs as they are available and when the City is eligible. Continue to administer the Affordable Homeownership Program, which provides limited fee waivers for deed-restricted for-sale affordable housing units. Information on these programs will be advertised on the City's website when funds or homes are available.

H-5 Action 2: Continue to partner with NeighborWorks to provide homeownership services, such as homebuyer education and one-on-one or group counseling.

H-6 Action 1: Continue to promote and support energy efficiency in new construction by encouraging developers to utilize Sacramento Municipal Utility District (SMUD) energy programs and other energy efficiency programs and to be consistent with the Sustainability Element of the General Plan and the City's Climate Action Plan.

H-6 Action 2: Continue to encourage participation in SMUD's PV (photovoltaic) Pioneer program by issuing PV system permits at no charge upon SMUD's approval.

H-7 Action 1: Continue to allow flexibility in development standards, such as smaller unit sizes and parking reductions for senior projects, and by allowing development incorporating universal design measures.

H-7 Action 2: Continue to contribute funding and work closely with local nonprofits and regional agencies to assess homeless needs and develop plans to address homelessness at a regional level. The City will annually meet with local service providers and regional agencies (as applicable) to assess the homeless needs of the City and the region.

H-7 Action 3: Continue to procure funding sources that will allow the City to contribute to agencies that provide services for persons with special housing needs.

H-8 Action 1: Continue to update the affordable housing unit database and to provide information regarding affordable housing opportunities, both through direct response to inquiries and making information available on the City's website.

H-8 Action 2: Consider a housing choice voucher (Section 8) education program for residents (neighbors) and landlords to provide awareness of the program and the opportunities and constraints it provides.

H-9 Action 1: Continue to review the appropriateness of providing regulatory incentives for units affordable to extremely low-, very low-, and low-income households, including second dwelling units, senior housing, and apartment units, and housing for special needs groups, including agricultural employees, persons with disabilities (including developmental disabilities), and individuals and families in need of emergency/transitional housing. Based upon this review, take subsequent action, as appropriate, to make the development of such units more financially feasible. Consider providing financial incentives, such as reducing, waiving, and/or deferring fees, where feasible.

H-10 Action 1: Continue to designate a staff planner to guide affordable housing development projects through the planning process and designate the Housing Program Manager to implement housing-related programs and policy initiatives.

H-10 Action 2: Continue to allow the Planning Director to serve as the approving authority on all multifamily projects of 150 units or less, including affordable projects, that are consistent with General Plan and zoning requirements.

H-10 Action 3: Continue to conduct interdepartmental meetings to coordinate the early review of development projects and address policy concerns.

H-11 Action 1: Continue to encourage more creative and flexibly designed projects with an affordable housing component through the use of the Design Review process, which eliminated minimum lot width and public street frontage requirements, thus creating more flexibility for higher-density projects.

H-11 Action 2: Consider adopting a Universal Design Ordinance that would encourage construction or modification of new and existing homes using design principles that allow individuals to remain in their homes as their physical needs and capabilities change.

H-12 Action 1: Continue to annually review the Housing Element to determine its effectiveness and its consistency with the General Plan, as part of the annual review required by Government Code Section 65400. Report on the findings of this review and suggest changes if needed.

H-13 Action 1: Continue to operate housing repair and/or rehabilitation programs that assist lower-income households occupying housing in need of repair, including the new Minor Home Repair program that offers forgivable loans to very low- and low-income homeowners whose homes have one or more health and safety hazards.

H-13 Action 2: Continue to refer individuals interested in utility assistance to the appropriate local energy provider, usually SMUD or Pacific Gas and Electric (PG&E), both of which offer programs to assist with utility costs.

H-13 Action 3: Provide information on available housing rehabilitation programs, such as the Minor Home Repair Program, to homeowners experiencing difficulty repairing health and safety hazards.

H-13 Action 4: Consider a rental inspection program that is administered by the Code Enforcement Department with the goal of enforcing Municipal Code standards for rental housing.

H-14 Action 1: If the one mobile home park in the City is in danger of being removed from the housing stock, partner with tenant associations or a nonprofit organization to provide assistance to mobile home park tenants in preserving their homes through the State Mobilehome Park Resident Ownership Program (MPROP), when appropriate.

H-15 Action 1: Monitor and evaluate the conversion of rental housing units to condominiums in order to assist in amending the land use plan to provide for additional multifamily areas if necessary.

H-16 Action 1: Continue to provide information about fair housing choices to residents by distributing the fair housing materials on request. Promptly address complaints of discrimination in the sale, rent, and development of housing.

H-17 Action 1: Maintain and update the City's affordable housing database as a mechanism to monitor and identify units at risk of losing their affordability subsidies or requirements.

H-17 Action 2: Continue to work with federal, State, and nonprofit housing organizations that function to purchase or fund the purchase of subsidized, at-risk complexes that the owner wishes to convert to market rate. Annually evaluate the need for the City to establish a program to preserve affordable units at risk of conversion.

General Plan Amendment and Rezone

The City has a shortfall of sites to accommodate its very low and low income needs RHNA. As such, the City will amend the General Plan land use designations and/or zoning in order to accommodate the City's share of regional housing needs on up to 42 sites in the City. All of the 42 sites, or some combination of the 42 sites, would be approved to accommodate the RHNA. The comprehensive scenario of approving the re-designation and rezoning of all sites is analyzed in this Draft EIR.

Existing Sites 2 through 7A (see Figure 2.0-3) could be rezoned from the existing zoning to RD-25 which will allow 20.1 to 30.0 dwelling units per acre. Candidate Sites C-1 through C-10, C-13 through C-37, and C-39 through C-40 could have the General Plan land use designation and zoning designation amended, as shown in Table 2.0-1. Two sites (C-12 and C-41) are not proposed for a change in designation or zoning at this time, but would be required to accommodate multifamily uses at the time subsequent projects request entitlements, consistent with H-1 Policy and implementing actions. The Existing Sites (Sites 2 through 7A), Candidate Sites (Sites C-1 through C-10, C-13 through C-37, and C-39 through C-40), and sites identified for multifamily housing through

a Housing Element action item (Sites C-12 and C-41) are collectively referred to herein as 'opportunity sites'. The acreage, location, existing General Plan land use designation, existing zoning, proposed General Plan land use designation, and proposed zoning for each opportunity site is shown in Table 2.0-1.

As shown in Table 2.0-1, the Project would change allowed land uses on up to 353.5 acres, which is realistically anticipated to accommodate up to approximately 8,843 high density residential units. Figure 2.0-3 depicts the location of each opportunity site.

TABLE 2.0-1: SITES PROPOSED FOR GENERAL PLAN LAND USE AND ZONING CHANGES

Map ID	Acreage	Location	Current Designations		Proposed Designations		Anticipated Dwelling Units[1]	Entitlement Status
			General Plan	Zoning	General Plan	Zoning		
2	12.4	East Franklin at SW corner of Quail Run Lane/Poppy Ridge Road and Bruceville Road	HDR	RD-20	HDR	RD-25	310	None
3	14	Laguna Ridge, SE corner of Poppy Ridge Road and Bruceville Road	HDR	RD-20	HDR	RD-25	350	None
4	9.6	Laguna Ridge, Bruceville Road just north of Bilby Road, just north of Seasons	HDR	RD-15	HDR	RD-25	240	None
5	11.5	Laguna Ridge, between Whitelock Parkway and Poppy Ridge, next to future community park site	HDR	RD-20	HDR	RD-25	288	None
6	15	Waterman and Grant Line Road	HDR	RD-20	HDR	RD-25	375	Tentative map approved; no design review
7A	8.7[2]	East Stockton just south of Sheldon	C/O/MF	SC(MF)	HDR	RD-25	218	None
C-1	8.7	East Stockton Blvd just north of Sheldon Road	MDR	SPAC99	HDR	RD-25	217	None
C-2	6.5[3]	NW corner of Big Horn and Bruceville Road	RR	SPALCF	HDR	RD-25	163	None
C-6	7.0	Laguna West Town Center	C	LC	HDR	RD-25	174	None
C-7	5.6	Laguna West Town Center	LI	MP	HDR	RD-25	139	None
C-8	6.3	Calvine Road east of Elk Grove Florin Road	LDR	RD-7	HDR	RD-25	158	Approved Tentative Map and Design Review

Map ID	Acreage	Location	Current Designations		Proposed Designations		Anticipated Dwelling Units[1]	Entitlement Status
			General Plan	Zoning	General Plan	Zoning		
C-9	8.0	Brown Road, south of Calvine Road near Elk Grove Florin Road	LDR	RD-5	HDR	RD-25	199	Approved tentative map
C-10	7.5	Stonelake, West Taron at Riparian	C	LC	HDR	RD-25	187	None
C-12	60.0[4]	Southeast Policy Area[3]	SEPA	AG-20	HDR	RD-25	1,500	In process, consistent
C-13	3.9	Laguna West Town Center	HDR	RD-25	HDR	RD-25	98	None
C-14	3.9	Laguna West Town Center	HDR	RD-25	HDR	RD-25	98	None
C-15	3.0	Willard Parkway at Bilby Road	ER	AG-80	HDR	RD-25	74	None
C-16	3.4		ER	AG-80	HDR	RD-25	84	None
C-17	2.7		ER	AG-80	HDR	RD-25	67	None
C-18	9.5	Laguna Ridge, SW corner of Poppy Ridge and Big Horn	HDR	AG-20	HDR	RD-25	238	None
C-19	0.9		HDR	AG-20	HDR	RD-25	23	None
C-20	1.6		HDR	AG-20	HDR	RD-25	40	None
C-21	4.4	Elk Grove Florin Road just south of Calvine	LDR	AR-5	HDR	RD-25	110	Prior application withdrawn
C-22	12.6	Brown Road, south of Calvine Road near Elk Grove Florin Road	LDR	AR-5	HDR	RD-25	315	None
C-23	18.2	Sheldon Road at Vytina Drive	LDR	AR-5	HDR	RD-25	456	None
C-24	16.3	Elk Grove Boulevard near Laguna Springs Drive (Capital Nursery site)	C	SPALCF/ AR-10	HDR	RD-25	407	None (recently vacant)
C-25	3.4	Elk Grove Boulevard at Backer Ranch (next to Nugget)	HDR	RD-20	HDR	RD-25	85	Application in process, consistent
C-26	5.2	Stonelake, West Taron at Elk Grove Boulevard	C	LC	HDR	RD-25	130	Approval expired
C-27	9.4	Maritime, just west of Harbor Point	LI	MP	HDR	RD-25	235	None
C-28	2.6	Laguna West Town Center	C	LC	HDR	RD-25	66	Approval expired
C-29	2.0	Laguna West Town Center	C	LC	HDR	RD-25	50	None
C-30	2.9	Laguna West Town Center	C	LC	HDR	RD-25	73	None
C-31	3.0	Harbour Point at Maritime	C	TC	HDR	RD-25	75	None
C-32	3.2	Elk Grove Boulevard, just west of Carlton Plaza	LDR	AR-2	HDR	RD-25	80	None

Map ID	Acreage	Location	Current Designations		Proposed Designations		Anticipated Dwelling Units[1]	Entitlement Status
			General Plan	Zoning	General Plan	Zoning		
C-33	9.8	East Stockton Boulevard at Bow Street	HDR	RD-20	HDR	RD-25	245	None
C-34	8.1	East Stockton Boulevard south of Bond Road, just north of Premier West Bank	HDR	RD-20	HDR	RD-25	204	None
C-35	3.7	East Stockton Boulevard at Banff Vista Drive	C	AC	HDR	RD-25	94	None
C-36	3.0	East Stockton Boulevard just south of Elk Grove Boulevard	C/O/MF	LC	HDR	RD-25	74	None
C-37	4.3	East Stockton Boulevard at Hampton Oak Drive	C	SC	HDR	RD-25	109	Approved tentative map and CUP
C-39	6.4	Laguna Boulevard and Bruceville Road	C/O/MF	SC	HDR	RD-25	161	Approved Tentative Map and Design Review
C-40	10.3	East Stockton Boulevard south of Calvine	LDR	SPAC99	HDR	RD-25	259	Approved tentative map (invalid)
C-41	15.0[5]	Sheldon/Bruceville/ Big Horn/Lewis Stein	RR	SPALCF	HDR	RD-25	375	None
Total		353.5 acres					8,843	

Notes:

[1] Anticipated dwelling units based on the conservative(upper) end (25 du/ac) of historical densities (average 24 du/ac)

[2] 9.7 acre site. Only 8.7 acres buildable due to reservation of 1 acre for drainage.

[3] 18 acre site. Only 6.5 acres assumed to be buildable due to floodplain.

[4] It is anticipated that the Southeast Policy Area will be adopted after the Housing Element. Therefore, the Housing Element includes H-1 Action 2 requiring this multifamily acreage in the final plan for the Southeast Area.

[5] Total site is 150± acres. Up to 15 acres are identified for HDR in H-1 Policy and existing General Plan Policy LU-40.

2.5 CONSISTENCY WITH THE ELK GROVE GENERAL PLAN

The General Plan serves as the blueprint for development in the City. It is a long-range planning document that describes the goals, policies, and programs to guide decision making. Once the General Plan is adopted, all development-related decisions must be consistent with the General Plan. If a development proposal is not consistent, it must be revised or the General Plan itself must be amended. State law requires a community's General Plan to be internally consistent. This means that the Housing Element, although subject to special requirements and a different schedule of updates, must function as an integral part of the overall General Plan, with consistency among it and the other General Plan elements.

The City of Elk Grove General Plan was adopted on November 19, 2003. It contains ten elements, including Circulation; Conservation and Air Quality; Economic Development; Historic Resources; Housing; Land Use; Noise; Parks, Trails and Open Space; Public Facilities and Finance; and Safety. The current Housing Element was last updated in 2009. The development potential and programs of the updated Housing Element are consistent with the land use envisioned by the Land Use Element and amended Land Use Policy Map, as revised by this Project. Land use and development projections of the General Plan are also linked to planned facilities and infrastructure capacity. Specific issues addressed in other sections of the General Plan but which are linked to and supported in the Housing Element include: (1) excellence in the design of new development (Land Use, Economic Development, and Public Facilities & Finance Elements); (2) safe and affordable housing for all persons (Land Use Element), and (3) relationship of a diversified economic base and associated jobs to housing supply (Economic Development).

The draft Housing Element has been reviewed in relationship to the Elk Grove General Plan and has been found to be internally consistent with the other elements of the City's General Plan, with the exception of General Plan amendments that will need to be undertaken to provide for land use designations and rezoning of all, or some combination of, the opportunity sites identified in Table 2.0-1.

SUBSEQUENT DEVELOPMENT ASSUMPTIONS

The Housing Element does not approve or entitle development nor does it require development. The Housing Element presents the City's plan to accommodate housing, as required by state law.

The Project's opportunity sites would accommodate up to 8,843 multifamily housing units and up to 28,453 persons, based on an average household size of 3.22 persons. The proposed change in land use designations and/or zoning on the opportunity sites would change the development potential of the sites, as shown in Table 2.0-2. Implementation of the Project would result in an increase of up to 4,875 housing units and up to 15,680 persons and would reduce potential employment by up to 2,058 employees when compared to the adopted General Plan.

TABLE 2.0-2: CAPACITY COMPARISON – EXISTING GENERAL PLAN CAPACITY V. PROPOSED PROJECT

MAP ID	*ACREAGE*	*EXISTING GENERAL PLAN CAPACITY*		*PROPOSED PROJECT CAPACITY*		*DIFFERENCE*	
		HOUSING UNITS	*EMPLOYEES*	*HOUSING UNITS*	*EMPLOYEES*	*HOUSING UNITS*	*EMPLOYEES*
2	12.4	248	0	310	0	62	0
3	14	280	0	350	0	70	0
4	9.6	144	0	240	0	96	0
5	11.5	230	0	288	0	58	0
6	15	300	0	375	0	75	0
7A	8.71	58	139	218	0	160	-139
C-1	8.7	130	0	217	0	87	0
C-2	6.52	3	0	163	0	160	0
C-6	7	0	200	174	0	174	-200
C-7	5.6	0	226	139	0	139	-226
C-8	6.3	44	0	158	0	114	0

MAP ID	ACREAGE	EXISTING GENERAL PLAN CAPACITY		PROPOSED PROJECT CAPACITY		DIFFERENCE	
		HOUSING UNITS	EMPLOYEES	HOUSING UNITS	EMPLOYEES	HOUSING UNITS	EMPLOYEES
C-9	8	40	0	199	0	159	0
C-10	7.5	0	215	187	0	187	-215
C-12	60.0	1,500	0	1500	0	0	0
C-13	3.9	98	0	98	0	0	0
C-14	3.9	98	0	98	0	0	0
C-15	3	12	0	74	0	62	0
C-16	3.4	13	0	84	0	71	0
C-17	2.7	11	0	67	0	56	0
C-18	9.5	190	0	238	0	48	0
C-19	0.9	18	0	23	0	5	0
C-20	1.6	32	0	40	0	8	0
C-21	4.4	1	0	110	0	109	0
C-22	12.6	3	0	315	0	312	0
C-23	18.2	4	0	456	0	452	0
C-24	16.3	2	0	407	0	405	0
C-25	3.4	68	0	85	0	17	0
C-26	5.2	0	150	130	0	130	-150
C-27	9.4	0	382	235	0	235	-382
C-28	2.6	0	76	66	0	66	-76
C-29	2	0	58	50	0	50	-58
C-30	2.9	0	84	73	0	73	-84
C-31	3	0	104	75	0	75	-104
C-32	3.2	2	0	80	0	78	0
C-33	9.8	196	0	245	0	49	0
C-34	8.1	163	0	204	0	41	0
C-35	3.7	0	81	94	0	94	-81
C-36	3	0	85	74	0	74	-85
C-37	4.3	0	104	109	0	109	-104
C-39	6.4	0	154	161	0	161	-154
C-40	10.3	72	0	259	0	187	0
C-41	15.04	8	0	375	0	367	0
Total		3,968	2,058	8,843	0	4,875	-2,058

Notes: 1) Existing General Plan land use capacity is based on the anticipated capacity of the adopted General Plan land use designation.

2.6 USES OF THE EIR AND REQUIRED AGENCY APPROVALS

This EIR may be used for the following direct and indirect approvals and permits associated with adoption and implementation of the Project.

CITY OF ELK GROVE

Project Approval

Actions taken by the City to adopt the Project include, but are not limited to:

- Certification of the Environmental Impact Report prepared for the Project;
- Adoption of a General Plan Amendment to update the Housing Element and to revise the Land Use Map for any or all of the sites as described in Table 2.0-1, with the exception of C-12 and C-41;
- Amend EGMC Title 23, Zoning Code, to revise the Zoning Map to rezone any or all of the sites as described in Table 2.0-1, with the exception of C-12 and C-41; and
- Amend EGMC Title 23, Zoning Code, to modify the RD-25 zoning district to adjust the allowed density range from 20.1 to 25.0 dwelling units per acre to 20.1 to 30.0 dwelling units per acre.

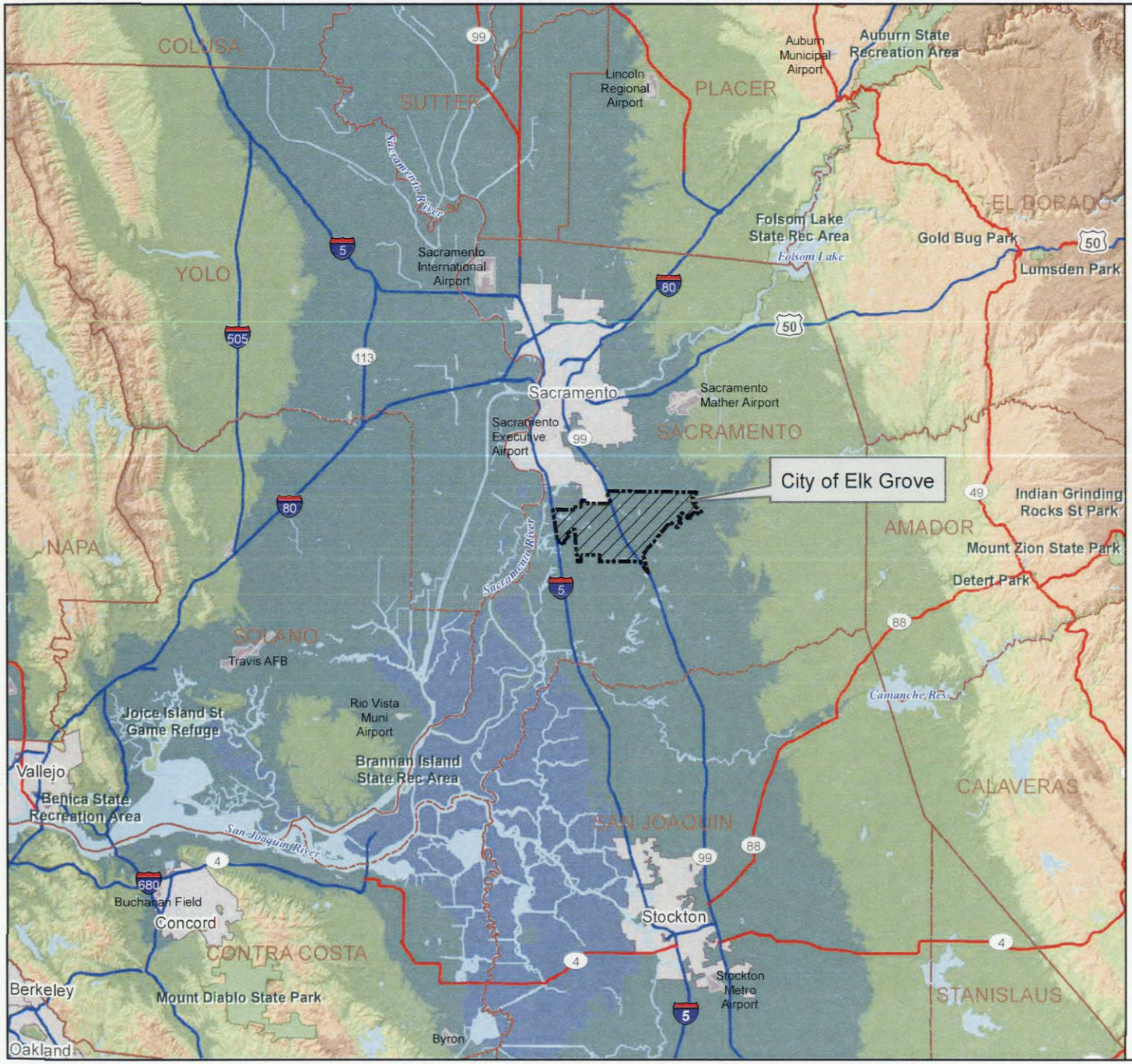
Subsequent Use

This EIR discloses environmental effects associated with implementation of the Project. When considering approval of subsequent activities under the Project, the City would utilize this EIR as the basis in determining potential environmental effects and the appropriate level of environmental review, if any, of a subsequent activity. Subsequent actions taken by the City may include, but are not limited to:

- Approval, construction, and operation of subsequent development proposals; and
- Implementation of various actions within the Housing Element.

OTHER GOVERNMENTAL AGENCY APPROVALS

After adoption, the updated Housing Element will be submitted to the State Department of Housing and Community Development for certification. Adoption and implementation of the Housing Element, including implementation of subsequent reasonably foreseeable actions, would not require any approvals or permits from other local, regional, state or federal agencies.



ELK GROVE HOUSING ELEMENT EIR

Figure 2.0-1:
City of Elk Grove

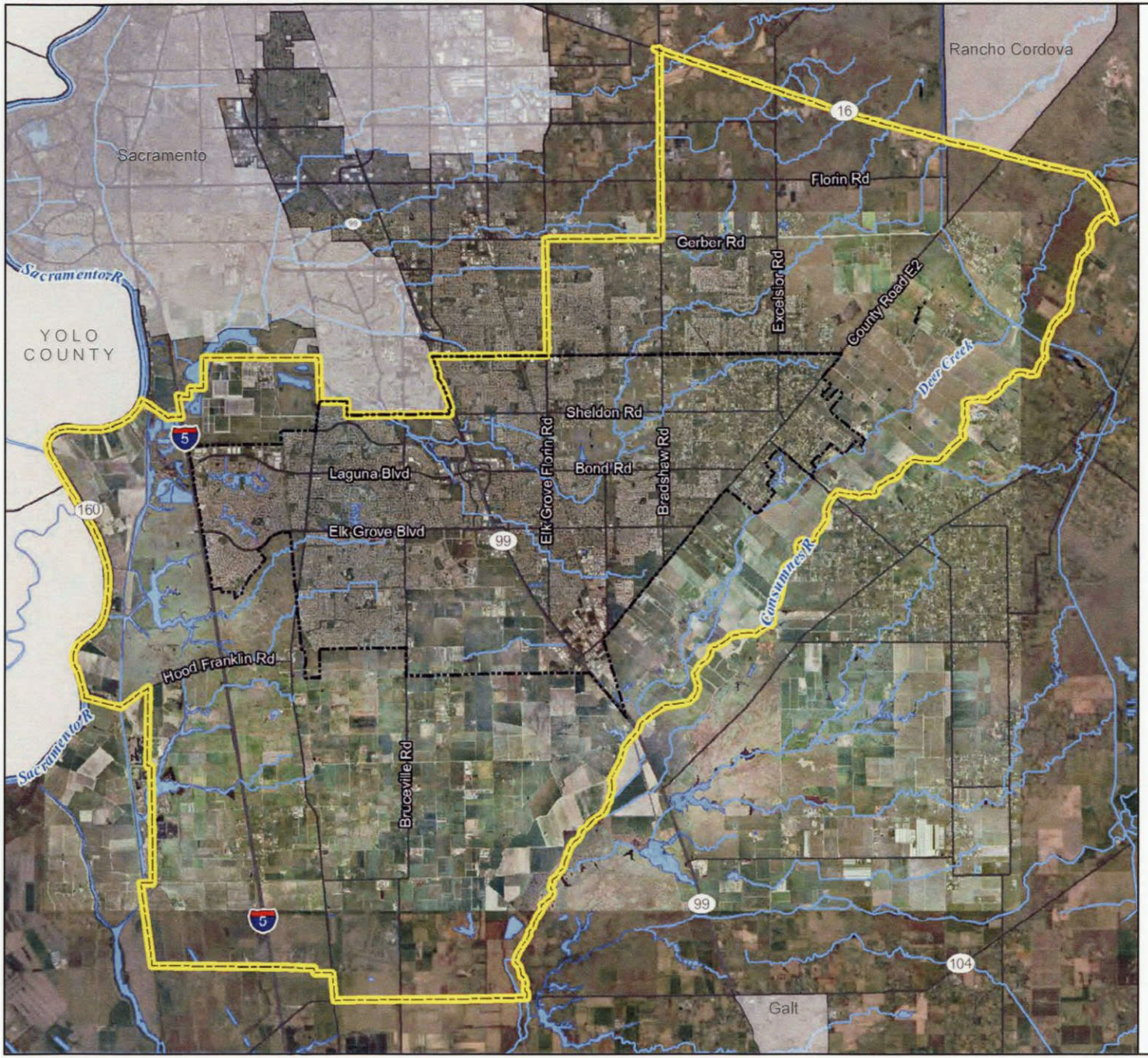
N
W E
S

0 2.5 5 10 15
Miles

1:750,000

Data source: Sacramento County GIS, California Spatial Information Library, ESRI's StreetMap North America.
Map date: July 1, 2013.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm



ELK GROVE HOUSING ELEMENT EIR

Figure 2.0-2: Project Location

City of Elk Grove

Elk Grove Planning Area

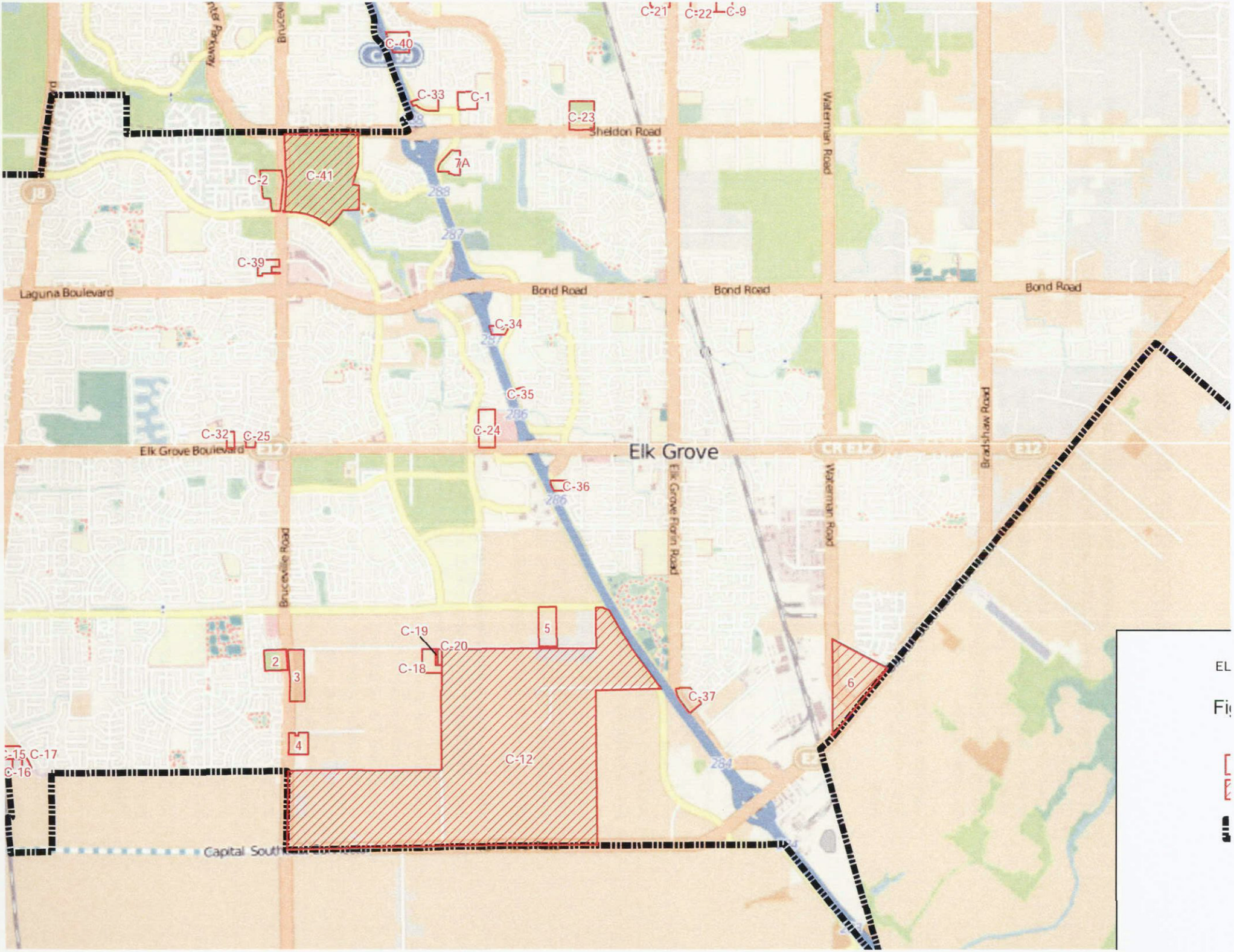
N W E S

0 0.5 1 2 3 Miles

1:165,000

Data sources: Sacramento County GIS data library, City of Elk Grove GIS, ESRI's StreetMap North America, ArcGIS Online Bing Aerials.
Map date: July 1, 2013.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm


C-21
C-22
C-9
C-40
C-33
C-1
C-23
Sheldon Road
Waterman Road
7A
C-2
C-41
288
287
C-39
Laguna Boulevard
Bond Road
Bond Road
Bond Road
C-34
C-35
286
C-24
C-32
C-25
Elk Grove Boulevard
Elk Grove
C-36
Elk Grove Florin Road
Waterman Road
Bradshaw Road
Bruceville Road
C-19
C-20
C-18
5
2
3
4
C-12
C-37
6
284
C-15
C-17
C-16
Capital South

This section provides an overview of the visual character that could be affected by implementation of the Project. Information in this section is based on site surveys conducted by De Novo Planning Group in 2012, ground and aerial photographs, and the following reference documents: *City of Elk Grove General Plan* (City of Elk Grove 2003a), *City of Elk Grove General Plan Environmental Impact Report* (General Plan EIR) (City of Elk Grove 2003b), *City of Elk Grove Municipal Code, Title 23 Zoning Code* (City of Elk Grove 2011), *Elk Grove Design Guidelines* (City of Elk Grove 2007), *Officially Designated State Scenic Highways* (Caltrans 2013), and the *Draft Housing Element* (City of Elk Grove 2013).

Comments received in response to the Notice of Preparation identified aesthetic issues related to large, multi-story high density residential structures, particularly in regards to the Laguna West sites.

3.1.1 ENVIRONMENTAL SETTING

VISUAL CHARACTERISTICS

Elk Grove is a suburban city bordered by the City of Sacramento, Interstate 5 (I-5), rural and agricultural lands, and open space. Elk Grove's urbanized area, which includes single family residential subdivisions, commercial development, multi-family apartment buildings, offices, and public/semi-public uses, generally extends from I-5 to the west to Waterman and Bradshaw Roads to the east. The natural agricultural and open space features bordering the City's east, south, and southwest boundaries and the rural area in the eastern portion of the City contribute to Elk Grove's identity. Elk Grove's riparian corridors bring natural areas into urbanized neighborhoods.

As described below, the majority of the opportunity sites are located in urbanized areas and are proximate to urban uses, including commercial, office, multi-family, and single family residential development. Characteristics of the sites and surrounding uses are described below. The location of the sites is shown on Figure 2.0-3.

Sites 2, 3, and 4 are located south of Poppy Ridge Road, with Site 2 on the west side of Bruceville Road and Sites 3 and 4 on the east side. Site 2 is mostly undeveloped agricultural land, with a single family residence, trees, landscaping, a barn, and accessory structures in the southeastern portion of the site and scattered trees in the southern portion. Site 2 is surrounded by single family subdivisions to the north, west, and south, with Site 3 located to the east across Bruceville Road. Site 3 is agricultural land, developed with a single family residence and greenhouses in the central portion of the site. Site 4 is undeveloped land; there is a construction trailer on the parcel. A rural residence, trees, landscaping, and accessory structures are located north of the central portion of the parcel. Trees border the western edge of Site 3 along Bruceville Road and are also along the northern border of Site 4 and scattered along the western and southern borders of Site 4. The Poppy Ridge Water Treatment Plant is located east of Site 3 and undeveloped agricultural land is also located east of Sites 3 and 4. Sites 3 and 4 are separated by a parcel of mostly undeveloped land, with the exception of two rural residences and accessory structures. West of Site 4 is a single family subdivision and multi-family apartments are to the south.

Site 5 is bordered by Whitelock Parkway to the north and Poppy Ridge Road to the south. Site 5 is generally flat and is mostly undeveloped agricultural land with rural residences, related improvements and landscaping, trees, and accessory buildings located in the southern portion of

the site. Trees are along the eastern border and the southern half of the western border. Agricultural land is located to the north, across Whitelock Parkway, and to the east. Rural residences and agricultural land are located to the west and to the south, across Poppy Ridge Road.

Site 6 is a triangularly shaped parcel located northeast of the junction of Waterman and Grant Line Roads. This parcel is mostly undeveloped grassland with high voltage powerlines running north to south along the western half of the parcel and Waterman Road bisecting the site. Waterman Road borders the site to the west, with industrial uses located beyond Waterman Road. Grant Line Road borders the site along its southeast boundary, with agricultural uses, a landscaping and water feature business, and a rural residence located southeast of Grant Line Road. Mosher Road borders the site to the north, with a single family residential subdivision, park, and undeveloped land located beyond.

Site 7A is located southeast of the intersection of East Stockton Boulevard and Cantwell Drive. Site 7A is undeveloped and mostly grassland, with an elevated fill area on the northern portion of the site and two depressions or pond-type features located in the southern portion of the site. A single family subdivision is located to the east, undeveloped land to the south, a park and ride lot and undeveloped land are to the west across East Stockton Boulevard, and rural residential uses are to the north across Cantwell Drive.

Sites C-1 and C-33 are located northeast of the Sheldon Road and SR-99 interchange. Site C-1 is undeveloped. The western portion of the site is elevated and slopes downward toward the eastern portion of the site as well as downward toward East Stockton Boulevard. There is a large depression in the eastern portion of the site that appears to have been used as a borrow pit. Site C-1 is bordered by a single family subdivision to the north, Herburger Elementary School and single family uses to the east, a single family subdivision and rural residential use to the south, and undeveloped land to the west. Site C-33 is mostly vacant with areas of both mature and younger trees. The central portion developed of Site C-33 is developed with a single family residential use and agricultural and storage accessory buildings. Site C-33 is bordered by Bow Street to the north, with undeveloped lands and rural residential uses north and east of Bow Street; East Stockton Boulevard to the south and west, with SR-99 located west of East Stockton Boulevard and undeveloped land to the south; agricultural land to the east; and a single family residential subdivision to the northeast.

Site C-2 is north of Big Horn Boulevard and west of Bruceville Road. The site is generally flat, with slight sloping in the area which borders Laguna Creek. The Laguna Creek corridor, which is characterized by riparian vegetation and areas of ponding, is located along the northern border of the site. There are scattered trees along the site's eastern boundary and in the northern area. Single family residential development is located to the west, multi-family development is to the north on the other side of Laguna Creek, the Barbara Morse Wackford Community and Aquatic Complex is located south across Lewis Stein Road, and undeveloped land (Site C-41) and the Laguna Creek corridor are to the east across Bruceville Road.

Sites C-6, C-7, C-13, C-14, C-28, C-29, and C-30 are south of Laguna Boulevard on both sides of Laguna Main Street in the Laguna West-Lakeside area. These sites are undeveloped land and are generally flat with little variation in topography. The sites are mostly bordered by ornamental trees planted along the sidewalks bordering the sites. The outer periphery of these sites is adjacent to single family development to the north, south, and west. Existing multifamily

development is integrated into and adjacent this cluster of sites, with existing multifamily development located on both sides of Laguna Main Street as well as south of Vaux Avenue. The Laguna Town Hall and associated community facilities, including Town Hall Park, bisects the southern portion of this cluster of sites. Laguna Boulevard is located north of the sites, with undeveloped land located to the northeast and office buildings located to the northwest.

Site C-21, C-8, C-9, and C-22 are located south of Calvine Road in the vicinity of the intersection of Calvine and Elk Grove-Florin Roads; Site C-21 is west of Elk Grove-Florin Road and Sites C-8, C-9, and C-22 are east of Elk Grove Florin Road. Site C-8 is under construction with a single family development and has been graded and improved with roadway infrastructure. A drainage channel is located near the southern and eastern boundaries of Site C-9 and the western boundary of Site C-8. Site C-9 is undeveloped, but appears to have been partially graded, and has scattered trees in the vicinity of the drainage channel. Site C-21 is mostly undeveloped with a single family residence and landscaping located in the southern portion of the site. Outbuildings are located in the vicinity of the single family residence and in the northwest portion of the site. Site C-22 is developed with three single family residential uses, accessory structures, and trees and landscaping; these residential uses are located along Brown Road in the southern portion of the site. This group of sites are adjacent to two commercial shopping centers that are located along Calvine Road. Single family residences are located to the south and east of Site C-21, to the south of Site C-8, and to the south and west of Site C-9. Merryhill School borders Site C-8 to the west. A small single family residential neighborhood borders the northeastern portion of Site C-22. Multifamily development is located to the southwest of Site C-22. Areas of undeveloped land are scattered throughout the area, particularly north of Calvine Road, a parcel north of Site C-21, and south of Site C-22. A rural residential use is located south of Site C-22.

Sites C-10 and C-26 are undeveloped parcels located in the Stonelake Village area. A gas station borders the northeast corner of these sites. These parcels are bordered by Elk Grove Boulevard to the north, Waterfowl Drive to the east, Riparian Drive to the south, and West Taron Drive to the west. Single family residential uses are located on the other sides of the roads adjoining these parcels to the south, east, and northeast. Commercial shopping centers are located across West Taron Drive to the west and on the other side of Elk Grove Boulevard to the north.

Sites C-15, C-16, and C-17 are located north of Bilby Road and west of Willard Parkway. Sites C-15 and C-17 are undeveloped. A single family residence, bordered by trees to the north and south, and agricultural accessory buildings are located in the northern portion of Site C-16. Rural single family residences are adjacent the southeast portion of the site and the Union Pacific Railroad line borders the northeast portion of the site. Single family subdivisions are located south of Bilby Road and east of Willard Parkway. Rural residential uses and agricultural land are located west of the Union Pacific Railroad. The northern boundary of this grouping of sites adjoins undeveloped land.

Sites C-18, C-19, and C-20 are mostly undeveloped parcels are bordered by Poppy Ridge Road to the north and are located southwest of the future intersection of Poppy Ridge Road and Big Horn Road in the Laguna Ridge Specific Plan. A single family residence is located in the northeast corner on Site C-20, with trees bordering the residence to the west and several scattered trees in the vicinity of the residence. Rural agricultural residential uses are located east of these parcels. Undeveloped agricultural land is located to the south, west, and north. Elk Grove Center, a Cosumnes River College satellite campus, is located to the northeast.

Site C-23 is a group of parcels located at the northeast corner of the intersection of Sheldon Road and Vytina Drive. These parcels are occupied by rural residential uses, with the residences and associated landscaping and accessory buildings located in the southern portion of the site along Sheldon Road. The central and northern portion of the site is undeveloped. The site is bordered by Vytina Drive and single family residential uses to the west, single family residential neighborhoods to the north and west, and Sheldon Road, Elk Grove Racquet Club, and single family residential uses to the south.

Site C-24 is the former Capital Nursery site located north of Elk Grove Boulevard northeast of the intersection of Elk Grove Boulevard and Auto Center Drive. The site is improved with the nursery center, associated accessory buildings, and former open air plant storage areas. The portion of the site fronting Elk Grove Boulevard is well landscaped with a variety of mature trees. A commercial center with Wal-Mart as the primary tenant is located west of the site and a row of landscaping trees is along the border between the two parcels, the Elk Grove Creek corridor borders the site to the north, commercial uses are located south, a single family subdivision is located adjacent the northern portion of the site's western boundary, and professional office uses are located along the southern portion of the western boundary.

Sites C-25 and C-32 are undeveloped parcels located north of Elk Grove Boulevard, west of Bruceville Road. A church and racquet club are located to the west of the sites. Single family residential uses are adjacent the sites to the north along the eastern area of the sites and undeveloped land is adjacent the northern boundary of the eastern portion of the sites. Elk Grove Boulevard is located south of the sites, with single family residential uses across Elk Grove Boulevard. These two sites are separated by an existing multi-family complex. A shopping center is located east of the sites.

Sites C-27 and C-31 are located east of I-5 and north of Elk Grove Boulevard in the southern portion of the Laguna West-Lakeside area. These undeveloped sites are bordered by Elk Grove Boulevard and the I-5 on-ramp to the south, office buildings to the east, Maritime Drive to the north, with single family residences located across Maritime Drive, and commercial uses to the south at the Elk Grove Boulevard and Harbor Point Drive intersection. Rows of trees are located along various points of the parcel boundaries. A Holiday Inn Express is located between the two sites. Merryhill School, the Lakeside condominiums, and office buildings are located east of the site across Harbor Point Drive.

Site C-30 is located west of Bruceville Road in the segment between Laguna Boulevard and Sheldon Road. Site C-30 is undeveloped, with a paved, fenced area in the southeast corner. Multi-family development is adjacent to the north and single-family residential development to the west. Commercial restaurants and shopping are located south of the site and to the east on the far side of Bruceville Road. Trees border this site to the west and north. The southeast area of the site has scattered trees.

Site C-34 is an undeveloped, relatively flat parcel. The site is bordered by an SR-99 off-ramp to the west, a church to the north, East Stockton Boulevard to the west, and undeveloped land and a bank parking lot to the south. There is a small island of land in the northeast portion of the site that is not part of the parcel and is occupied by an electrical substation.

Site C-35 is a mostly undeveloped, generally level parcel located west of East Stockton Boulevard. A paved parking lot is located in the centrally in the southern portion of the site. Banff Vista Drive

and Calvary Christian Center are located to the south, Hospenthal Way is to the east, with single family residential development located on the far side of Hospenthal Way and bordering the northeast corner of the site, and a rural residential parcel that includes a residence and assorted accessory buildings is located to the north. East Stockton Boulevard and SR-99 are located to the west.

Site C-36 is an undeveloped, generally level parcel located southeast of the intersection of the northbound exit ramp and East Stockton Boulevard. The site is bordered by a mobile home park to the south, single family residential development to the west, a shopping center to the north, and East Stockton Boulevard to the west.

Site C-37 is undeveloped, level land located north of the intersection of East Stockton Boulevard and Hampton Drive. SR-99 is located to the west/southwest beyond East Stockton Boulevard. LifePointe Christian Church is located to the southeast and a single family neighborhood borders the site to the north and east. Elk Grove-Florin Road borders a small portion of the northwest area of the site and Elk Grove Regional Park is located beyond Elk Grove-Florin Road. A billboard oriented to northbound drives on SR-99 and several utility poles are located on the site.

Site C-40 appears to have been previously developed, with an abandoned driveway, utility poles, and other accessory improvements, but no structures, located on the site. The site is primarily grassland with scattered native and non-native trees. Single family development is adjacent the site to the north, east, and south. Undeveloped land abuts the western portion of the southern boundary of the site. East Stockton Boulevard is adjacent the site to the west, with SR-99 located beyond East Stockton Boulevard. Single family residences are located to the east and south, beyond the UPRR tracks, and a single family subdivision is adjacent the northern border.

Site C-41 is undeveloped land located north of Big Horn Boulevard and east of Bruceville Road. The site is generally flat, with slight sloping in the area of the Laguna Creek corridor, which flows through the central portion of this group of parcels. The confluence of Whitehouse Creek and Laguna Creek is east of the sites. The Laguna Creek corridor, which is characterized by riparian vegetation and areas of ponding is located outside of the parcel boundaries of Sites C-2 through C-5. Undeveloped land (Site C-2) is located to the west, south of Laguna Creek, and to the west of the southern portion of Site C-41. Single family residential development is located north of Sheldon Road and south of Big Horn Boulevard. Commercial uses are located at the southeast corner of Bruceville Road and Big Horn Boulevard. Multi-family development adjoins this group of sites in two locations: at the southwest intersection of Bruceville and Sheldon Roads and east of Lewis Stein road. WinCoFoods is located east of the sites, beyond Lewis Stein Road.

3.1.2 REGULATORY SETTING

LOCAL

City of Elk Grove General Plan

The following applicable policies and actions related to aesthetics are taken from the Land Use, Parks, Trails and Open Space, and Conservation and Air Quality Elements of the City of Elk Grove General Plan.

Policy CAQ-8 Large trees (both native and non-native) are an important aesthetic (and, in some cases, biological) resource. Trees which function as an important part of the City's

or a neighborhood's aesthetic character or as natural habitat should be retained to the extent possible during the development of new structures, roadways (public and private, including roadway widening), parks, drainage channels, and other uses and structures. If trees cannot be preserved onsite, offsite mitigation or payment of an in-lieu fee may be required by the City. Where possible, trees planted for mitigation should be located in the same watershed as the trees, which were removed. Trees that cannot be protected shall be replaced either on-site or off-site as required by the City.

CAQ-8-Action 1 When reviewing native or non-native trees for preservation, consider the following criteria:

- Aesthetic value
- Biological value
- Shade
- Water quality benefits
- Runoff reduction
- Air quality (pollutant reduction)
- Health of the tree(s)
- Suitability for preservation in place
- Safety hazards posed by the tree(s)

Policy PTO-15 The City views open space lands of all types as important resource which should be preserved in the region, and supports the establishment of multipurpose open space areas to address a variety of needs, including, but not limited to:

- Maintenance of agricultural uses;
- Wildlife habitat
- Recreational open space
- Aesthetic benefits
- Flood control

To the extent possible, lands protected in accordance with this policy should be in proximity to Elk Grove, to facilitate use of these areas by Elk Grove residents, assist in mitigation of habitat loss within the city, and provide an open space resource close to the urbanized areas of Elk Grove.

Policy CAQ-7 Encourage development clustering where clustering would facilitate on-site protection of woodlands, grasslands, wetlands, stream corridors, scenic areas, or other appropriate natural features as open space, provided that:

1. Urban infrastructure capacity is available for urban use.
2. On-site resource protection is appropriate and consistent with other General Plan Policies.
3. The architecture and scale of development is appropriate for the area.
4. Development rights for the open space area are permanently dedicated and appropriate long-term management is provided for by either a public agency, homeowners association, or other appropriate entity.

Policy CAQ-17 The City recognizes the value of naturally vegetated stream corridors, commensurate with flood control and public acceptance, to assist in removal of pollutants, provide native and endangered species habitat and provide community amenities.

Policy LU-35 The City of Elk Grove shall require that new development—including commercial, office, industrial, and residential development— is of high quality and reflects the City's desire to create a high quality, attractive, functional, and efficient built environment.

LU-35-Action 2 The Design Guidelines shall include a provision to minimize the use of reflective materials in building design in order to reduce the potential impacts of daytime glare.

LU-35-Action 3 The Citywide Design Guidelines shall include provisions for the design of outdoor light fixtures to be directed/shielded downward and screened to avoid nighttime lighting spillover effects on adjacent land uses and nighttime sky glow conditions.

City of Elk Grove Zoning Code

Title 23, Zoning, of the City Municipal Code (Zoning Code) carries out the policies of the Elk Grove General Plan by classifying and regulating the uses of land and structures within the City, consistent with the General Plan. The Zoning Code is adopted to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the City [Ord. 8-2011 §3(B), eff. 6-24-2011].

The Zoning Code establishes development standards for high density residential development (R-20, R-25, and R-30 districts). As set forth in Section 23.30.040, high density residential uses typically have required setbacks of 25 feet for front and side yards and 20 feet for rear yards, a minimum open space requirement of 25 percent, and height limits of 40 feet for primary structures and 16 feet for accessory structures. When abutting a single-family residential or open space district, the side and rear setback for all three or more story multifamily structures (or portions thereof) is one hundred feet measured from the property line of the common boundary.

The Zoning Code provides standards for multifamily lighting (Chapter 23.56). For instance, all outdoor lighting must be constructed with full shielding, and automatic timing devices are required for all new outdoor light fixtures with the off-hours defined as between 10:00 p.m. and 6:00 a.m. The Zoning Code regulates the level of illumination resulting from development during hours of darkness and states that new outdoor lighting fixtures must be energy efficient with a rated average bulb life of not less than 10,000 hours. Zoning regulations also include development and design standards for the location of signs along roadways to achieve an aesthetically pleasing appearance (Section 23.62).

Design Review

Multi-family projects are required to go through the design review process pursuant to Section 23.16.080 of the Zoning Code. In order for a design review permit to be granted, the approving authority must make specific findings, including:

- The proposed project is consistent with the objectives of the General Plan, complies with applicable zoning regulations, specific plan provisions, special planning area provisions, Citywide design guidelines, and improvement standards adopted by the City;
- The proposed architecture, site design, and landscape are suitable for the purposes of the building and the site and will enhance the character of the neighborhood and community; and
- The architecture, including the character, scale and quality of the design, relationship with the site and other buildings, building materials, colors, screening of exterior appurtenances, exterior lighting and signing and similar elements establishes a clear design concept and is compatible with the character of buildings on adjoining and nearby properties.

Design Guidelines

The City conducts Design Review to ensure quality development in keeping with the desired character of the City and in accordance with the City's design objectives as promulgated in the Design Guidelines and to ensure that the appearance of development will be compatible and harmonious with the use and enjoyment of surrounding properties. Design Review approval is required for single-family residential subdivision maps, multi-family residential development, and public/quasi-public (parks). This Aesthetics chapter focuses on those guidelines that are applicable to the Project and are adopted for the purpose of avoiding or mitigating an environmental aesthetic effect.

MULTI-FAMILY DEVELOPMENT

Chapter 4A of the Design Guidelines regulates site planning for multi-family development. Multi-family project design is required to be compatible with surrounding neighborhoods and land uses. Site planning guidelines 1 through 5 address building placement and orientation, ensuring multi-family development considers a physical and functional perspective, relationship and compatibility with surrounding uses, and the visual impact and experience for residents, visitors, and passersby. Multifamily projects with two or more buildings are required to provide variation between building setbacks and placement. Significant natural features of the site, including trees/tree clusters, topography, and creeks, are encouraged to be incorporated into the project design. Site planning guidelines 10 through 16 address access and parking and require that parking fields are designed with a series of smaller lots to minimize the expansive appearance of the parking field. Site planning guidelines 17 through 20 address landscaping, with the purpose of enhancing building design, public views and spaces, and providing buffers, transitions, and screening, with specific provisions for perimeter landscaping.

Site lighting for multi-family projects include lighting of project entries, drive aisles and parking areas, pedestrian areas, and for the architectural enhancement of the development. Site planning guideline 15 requires landscaping, berming, or other screening around parking areas adjacent residential areas to reduce potential noise and light effects. Guideline 24 requires exterior lighting to be pedestrian in scale with a maximum height of 14 feet. Guideline 25 states that exterior site lighting shall be designed so that light is not directed off the site and the light source is shielded downward from direct off-site viewing. Specifically, light features shall be located and designed

with cut-off lenses to avoid light spill and glare on adjacent properties. In order to minimize light trespass on residential properties directly abutting a multi-family site, illumination measured at the nearest residential property line shall not exceed the moon's potential ambient illumination of one-tenth (0.1) foot-candle. Guideline 26 encourages use of low-level bollard lighting for illumination of pedestrian walkways. Guideline 27 states that outdoor light fixtures used to illuminate architectural and landscape features shall use a narrow cone of light for the purpose of confining the light to the object of interest and minimize light trespass and glare. Guidelines 18 and 19 apply the same standards to building lighting.

Chapter 4B of the Design Guidelines establish architectural requirements for multi-family development. Architectural requirements guidelines 4 through 7 address massing, scale, and form, *including the relationship* between the proposed development and adjacent single-family uses. Where adjacent single family development is designed with one- and two-story homes, the outermost units of adjoining multi-family buildings are limited to two-story within 100 feet of the common boundary. Architectural requirements guideline 18 requires all exterior building lighting to be designed so that light is not directed off the site and the light source is shielded downward from direct off-site viewing.

Tree Preservation and Protection Chapter 19.12

The Tree Preservation and Protection Ordinance was codified in Chapter 19.12 of the City Municipal Code and strives to protect and preserve landmark trees and trees of local importance with a single trunk 6 inches diameter at breast height (dbh) or greater or a multi-trunk with a combined dbh of 6 inches or greater. Chapter 19.12 requires mitigation for the removal of landmark trees, trees of local importance, secured trees, and trees in the right-of-way or on City property. Mitigation may include on-site or off-site replacement, payment of an in-lieu fee, credit for existing smaller trees, and/or on-site or off-site relocation.

3.1.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have significant impact on aesthetics if it will:

- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

As described in the NOP (see Appendix A), the Project would not have a significant adverse impact on scenic resources or scenic vistas and this issue will not be addressed further.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: Potential to substantially degrade the existing visual character or quality of the site and its surroundings (significant and unavoidable)

A main objective of the Housing Element is to encourage development of a variety of housing types and densities. Chapter 2.0, Project Description, identifies the proposed goals and implementing actions contained in the Draft Housing Element to assist the City in addressing its housing needs. Implementation of the Housing Element and development of new housing would, for the most part, be in currently urbanized neighborhoods and occur on properties that are currently designated in the General Plan and zoned for residential or other urban development.

Many of the programs in the Housing Element will not affect visual character, including programs that commit the City to considering or monitoring various housing related issues, but do not require any specific action (H-8 Action 2, H-11 Action 2, H-13 Action 4, H-14 Action 1, and H-15 Action 1), programs for continued implementation of adopted or existing standards, regulations, and programs (H-2 Action 1, H-3 Action 1, H-4 Actions 1 and 3, H-5 Action 1, H-7 Actions 1 and 3, H-9 Action 1, H-11 Action 1, H-12 Action 1, and H-17 Action 1), programs involving City processing of housing projects (H-3 Action 2, H-4 Action 2, H-10 Actions 1 through 3), programs involving coordination with various agencies, organizations, residents, and property owners (H-5 Action 2, H-7 Action 2, H-13 Actions 1 through 3, H-14 Action 1, and H-17 Action 2), and programs involving outreach and the dissemination of information regarding housing-related issues (H-6 Actions 1 and 2, H-8 Action 1, and H-16 Action 1).

While H-1 Action 2 requires high-density residential development within the Southeast Policy Area, no specific sites within the Southeast Policy Area are identified for a change in land use designation or zoning as part of the Project. A separate planning process is underway to develop a strategic plan for the development of the entire 530-acre Southeast Policy Area.

Housing Element program H-1 Action 1 requires the City to maintain its inventory of adequate sites to accommodate the RHNA. As described in Chapter 2.0, the City does not have adequate sites to accommodate its lower income allocation. Table 2.0-1 in Chapter 2.0 identifies the opportunity sites considered for General Plan land use and zoning changes to allow high-density residential development.

While no specific development projects are proposed at this time, subsequent multi-family development on the opportunity sites would represent a change to the current visual character of these sites. Sites 2, 3, 4, 5, 6, 7A, C-12, C-13, C-14, C-18, C-19, C-20, C-25, C-33, C-34, C-36, and C-39 are designated to allow high density residential development and would allow multi-family uses under the adopted General Plan land use designations. Site C-1 is designated for medium density residential use. Sites C-21 through C-23, C-26, C-32, and C-40 are designated for low density residential uses. Sites C-15 through C-17 are designated for estate residential uses. Sites C-2, C-8, C-9, and C-41 are designated for rural residential use. Sites C-6, C-24, C-28 through C-31, C-35, and C-37 are designated for commercial use. Sites C-7 and C-27 are designated for light industrial uses.

The opportunity sites are undeveloped or are developed with low intensity uses. Implementation of the Project would result in changes to the land use designations and/or zoning that would accommodate increased development densities and intensities on the opportunity sites, as

described in Chapter 2.0. Multi-family development in the range of 20.1 to 30.0 dwelling units per acre would be accommodated. Development of multi-family uses would likely require the demolition of existing structures and facilities on the developed opportunity sites. Views of the opportunity sites would result in a change in the visual character of the sites, which include sites covered with native grasses and trees and sites with low intensity development, to high density residential development with increased building mass and intensity.

A future multi-family residential project on any or all of the opportunity sites could involve the construction of one or more apartment buildings and associated garage/carport and parking areas pursuant to the development standards of the RD-25 district, which requires minimum setbacks as described previously, limits lot coverage to 75%, and imposes a height limit of 40 feet among other provisions. Multi-family development adjacent single-family neighborhoods would be limited to two story buildings within 100 feet of the adjoining single family residential use, but could be as high as four stories at other areas on the site. New multi-family development would require design review pursuant to Section 23.16.080 of the Elk Grove Zoning Code, which requires development subject to design review to be consistent with the objectives of the General Plan and in compliance with applicable zoning regulations, specific plan provisions, special planning area provisions, Citywide design guidelines, and improvement standards. The design review findings require that the architecture, including the character, scale and quality of the design, relationship with the site and other buildings, building materials, colors, screening of exterior appurtenances, exterior lighting and signing and similar elements be compatible with the character of buildings on adjoining and nearby properties.

Sites C-2, C-3, C-4, C-5, and C-24 are adjacent creek corridors. Section 23.60.020 of the Zoning Code addresses requires that all structures shall be located outside of the one hundred-year floodplain and a minimum twenty-five feet from the centerline of the creek or tributary. Policy CAQ-21 requires a stream buffer zone, generally of 100 feet (50 feet from the stream centerline), for development adjacent to natural streams in order to provide a transition area from the waterway to adjoining development. The Zoning Code requirement and General Plan policies are intended to buffer the riparian habitat along the City's creeks and waterways from future development and to ensure that the natural and aesthetic features of the creeks and waterways are protected.

Views of many of the sites include tree breaks along the property line, scattered trees, and clusters of trees, as previously described. Sites with existing trees, as previously described, are subject to the tree preservation and protection requirements in the General Plan and Municipal Code.

The combination of the procedures of the City's design review process, the standards of Title 23 of the Zoning Code, and applicable General Plan policies would address the design and location of a new development on the opportunity sites to ensure design compatibility with surrounding development and that sites characterized by natural features, specifically trees and creek corridors, would be designed to preserve and protect these features. The majority of sites are located in areas planned for urban development surrounded primarily by commercial, office, residential, school, and park uses, or a combination of these uses. However, views of the opportunity sites would significantly change with the introduction of multi-family development with two- to four-story buildings and would also exceed the densities and intensities that were anticipated in the General Plan, as previously described. This change to existing visual character is a significant impact.

MITIGATION MEASURES

The City's development standards established in the Zoning Code, standards required by the Design Guidelines, and policies related to protection of visual resources in the General Plan would ensure that future development is compatible with neighboring uses. General Plan policies described in Section 3.3 which protect trees, wetlands, and natural habitat, would partially reduce visual impacts by ensuring that these natural and visual resources are retained to the extent feasible. The City's existing requirements and the previously identified mitigation measures would reduce potential visual impacts to the maximum extent feasible. The only additional mitigation would be to reduce the proposed development densities, which would not achieve the objectives of the Project. Therefore, the impact to visual character is **significant and unavoidable**.

Impact 3.1-2: Potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (Potentially Significant)

Many of the programs in the Housing Element will not result in physical effects on the environment that would create new sources of substantial light or glare which would adversely affect day or nighttime views in Elk Grove; these programs include the programs described under Impact 3.1-1 that will not affect visual character. As previously described, the Southeast Policy Area was anticipated for urbanization in the General Plan and a separate planning process is underway to develop a plan for the development of the entire 1,200-acre Southeast Policy Area.

As described in Chapter 2.0, the City does not have adequate sites to accommodate its lower income allocation. Table 2.0-1 in Chapter 2.0 identifies the opportunity sites considered for General Plan land use and zoning changes to allow high-density residential development.

The proposed changes in General Plan land use designations and zoning would allow all, or a combination of, the opportunity sites to be developed with multi-family residential uses, although no specific development projects have yet been proposed.

New sources of daytime glare would occur primarily from the windshields of vehicles travelling to and from the opportunity sites and parked at the sites and from light bouncing off of reflective building surfaces such as headlamps reflecting off large windows.

New light sources introduced by the Project would include street lighting, parking lot and exterior building lights, and security-related lighting. These new light sources could result in adverse affects to adjacent land uses through the "spilling over" of light into these areas and intensified nighttime lighting conditions in the Project vicinity.

The City's Design Guidelines include a number of measures to ensure that outdoor lighting for multifamily residential development is located and shielded in order to not spill over or create glare on adjacent lots. However, there is the potential for glare to result from the use of reflective building materials. This is a **potentially significant** impact.

MITIGATION MEASURES

Mitigation Measure 3.1-1: *Exterior building materials on multifamily and nonresidential structures shall be composed of at least 50 percent low-reflectance non-polished surfaces. All bare metallic surfaces shall be painted with flat finishes to reduce reflected glare.*

Timing/Implementation: Prior to issuance of building permits.

Enforcement/Monitoring: City of Elk Grove Planning Department.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure 3.1-1 would reduce potential daytime glare impacts by ensuring that future multi-family development projects minimize use of reflective surfaces. Implementation of Mitigation Measure 3.1-1 would ensure that potential impacts associated with lighting and glare are reduced to a **less than significant** level.

This page left blank intentionally.

This section describes the regional air quality, current attainment status of the air basin, local sensitive receptors, emission sources, and impacts that are likely to result from Project implementation. Analysis of impacts associated with greenhouse gases and climate change is in Section 3.4. No comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic.

3.2.1 EXISTING SETTING

SACRAMENTO VALLEY AIR BASIN

The City is located within the Sacramento Valley Air Basin (SVAB). The SVAB is the northern half of California's Great Valley and is bordered on three sides (west, north, and east) by mountain ranges, with peaks in the eastern range above 9,000 feet. The SVAB is approximately 13,700 square miles and essentially a smooth valley floor with elevations ranging from 40 to 500 feet. The rolling valley is interrupted by the Sutter Buttes, an area of 80 square miles in northern Sutter County, which rise abruptly to more than 2,100 feet above the valley floor.

Climate

The climate in the Project area is considered Mediterranean, which is characterized by hot, dry summers and cool, wet winters. Within the Project area, temperatures range from an average January low of approximately 36°F to an average July high of approximately 96°F. Between mid-April and mid-October, significant precipitation is unlikely and high temperatures often peak at over 100 degrees Fahrenheit (F) with lows in the high 50s and low 60s.

Winters are fairly mild, with the most rainfall coming in January. Rainfall in the Project area averages approximately 26 inches annually and occurs predominantly from October to May. During the winter, highs are typically in the 60s with lows in the 30s. "Tule fog" (thick ground fog) is often present during the autumn and winter months. The typical seasonal pattern is for North Pacific cyclonic storms to periodically sweep into the area from October through April and for high pressure to dominate over the area and to deflect storms from May to October.

Air Movement

As with all of Central California, climate in the Project area is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell over the northeastern Pacific Ocean. Climate is also affected by the temperature moderating effects of the nearby oceanic heat reservoir. Warm summers, cool winters, rainfall, daytime onshore breezes, and moderate humidity characterize regional climatic conditions.

In summer, when the high-pressure cell is strongest, temperatures are very warm and humidity is low. The daily incursion of the sea breeze into the Central Valley, however, creates persistent breezes that moderate the summer heat. In winter, when the high-pressure cell is weakest, conditions are characterized by occasional rainstorms interspersed with stagnant conditions and sometimes heavy fog.

Airflow patterns in the basin can be characterized by one of eight directional types, the most frequent being northwesterly, that is to say, predominant surface wind flows in the Project area are from the south/southeast. These wind flows generally occur at speeds of approximately 9-10 mph (WRCC 2007, CARB 1992). The northwesterly flow is predominant in spring and summer, but seasonal variations do occur. Calm conditions dominate the winter months.

Inversions occur in the SVAB with great frequency in all seasons. The most stable inversions occur in late summer and fall. The summertime inversions are often the result of marine air pushing under an overlying warm air mass. These are termed "marine inversions" and are generally accompanied by brisk afternoon winds, which provide good air circulation.

In contrast, many autumn inversions are the result of warm air subsiding in a high-pressure cell where accompanying light winds do not provide adequate dispersion. Autumn inversions limit vertical mixing, creating a very stable layer of air with very light or calm winds. These inversions are usually present on clear cold nights during late fall and winter. In the morning, these ground based inversions are weakened and eventually eliminated by solar heating. As a result, they are strongest in the late night and early morning, when ground-level temperatures are coldest and solar radiation is low.

Seasonal Pollution Variations

Carbon monoxide, oxides of nitrogen, particulate matters, and lead particulate concentrations in the late fall and winter are highest when there is little interchange of air between the valley and the coast and when humidity is high following winter rains. This type of weather is associated with radiation fog, known as tule fog, when temperature inversions at ground level persist over the entire valley for several weeks and air movement is virtually absent.

Pollution potential in the Project area is relatively high due to the combination of air pollutant emissions sources, transport of pollutants into the area and meteorological conditions that are conducive to high levels of air pollution. Elevated levels of particulate matter (primarily fine particulates or $PM_{2.5}$) and ground-level ozone are of most concern to regional air quality officials.

Local carbon monoxide "hot spots" are important to a lesser extent. Ground-level ozone, the principal component of smog, is not directly emitted into the atmosphere but is formed by the reaction of reactive organic gases (ROG) and nitrogen oxides (NOx) (known as ozone precursor pollutants) in the presence of strong sunlight. Ozone levels are highest in the Project area during late spring through early fall, when weather conditions are conducive and emissions of the precursor pollutants are highest.

Surface-based inversions that form during late fall and winter nights cause localized air pollution problems (PM_{10} and carbon monoxide) near the emission sources because of poor dispersion conditions. Emission sources are primarily from automobiles. Conditions are exacerbated during drought-year winters.

CRITERIA POLLUTANTS

The United States Environmental Protection Agency (EPA) uses six "criteria pollutants" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). Each criteria pollutant is described below.

Ozone (O_3) is a photochemical oxidant and the major component of smog. While O_3 in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the sun, high concentrations of O_3 at ground level are a major health and environmental concern. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC) and oxides of nitrogen (NOx) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak O_3 levels occur typically during the warmer times of the year. Both VOCs and NOx are emitted by transportation and industrial sources. VOCs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents.

The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Carbon monoxide (CO) is a colorless, odorless and poisonous gas produced by incomplete burning of carbon in fuels. When CO enters the bloodstream, it reduces the delivery of oxygen to the body's organs and tissues. Health threats are most serious for those who suffer from cardiovascular disease, particularly those with angina or peripheral vascular disease. Exposure to elevated CO levels can cause impairment of visual perception, manual dexterity, learning ability and performance of complex tasks.

Nitrogen dioxide (NO_2) is a brownish, highly reactive gas that is present in all urban atmospheres. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. Nitrogen oxides are an important precursor both to ozone (O_3) and acid rain, and may affect both terrestrial and aquatic ecosystems. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NOx). NOx plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NOx forms when fuel is burned at high temperatures. The two major emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

Sulfur dioxide (SO_2) affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO_2 is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic

buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. Ambient SO_2 results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Particulate matter (PM) includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO_2 and VOCs are also considered particulate matter.

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO_2) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death.

Respirable particulate matter (PM_{10}) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation by themselves, or in combination with other gases. Particulate matter is caused primarily by dust from grading and excavation activities, from agricultural activities (as created by soil preparation activities, fertilizer and pesticide spraying, weed burning and animal husbandry), and from motor vehicles, particularly diesel-powered vehicles. PM_{10} causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

Fine particulate matter ($PM_{2.5}$) consists of fine particles, which are less than 2.5 microns in size. Similar to PM_{10}, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities such as burning. It is also formed through the reaction of other pollutants. As with PM_{10}, these particulates can increase the chance of respiratory disease, and cause lung damage and cancer. In 1997, the EPA created new Federal air quality standards for $PM_{2.5}$.

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also impacts soils and damages materials, and is a major cause of visibility impairment.

Lead (Pb) exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil or dust. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and subsequent heart disease.

ODORS

Typically odors are regarded as a nuisance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

A sensitive receptor is a location where human populations, especially children, seniors, and sick persons, are present and where there is a reasonable expectation of continuous human exposure to pollutants. Examples of sensitive receptors include residences, hospitals and schools. The Project would not include residences with sensitive receptors. Additionally, the Project is in a rural area with very low density of sensitive receptors, none of which would be significantly affected by the Project.

AMBIENT AIR QUALITY

Both the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and California state ambient air quality standards are summarized in **Table 3.2-1** for important pollutants. The federal and state ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and particulate matter between 2.5 and 10 microns in diameter (PM_{10}).

The U.S. Environmental Protection Agency established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. The 1-hour ozone standard was phased out and replaced by an 8-hour standard of 0.075 PPM. Implementation of the 8-hour standard was delayed by litigation, but was determined to be valid and enforceable by the U.S. Supreme Court in a decision issued in February of 2001.

TABLE 3.2-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	*AVERAGING TIME*	*FEDERAL PRIMARY STANDARD*	*STATE STANDARD*
Ozone	1-Hour 8-Hour	-- 0.075 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.53 ppm 0.100 ppm	0.03 ppm 0.18 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm 75 ppb	-- 0.04 ppm 0.25 ppm
PM10	Annual 24-Hour	-- 150 ug/m3	20 ug/m3 50 ug/m3
PM2.5	Annual 24-Hour	15 ug/m3 35 ug/m3	12 ug/m3 --
Lead	30-Day Avg. 3-Month Avg.	-- 1.5 ug/m3	1.5 ug/m3 --

NOTES: PPM = PARTS PER MILLION, PPB = PARTS PER BILLION, UG/M3 = MICROGRAMS PER CUBIC METER
SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2012 (WWW.ARB.CA.GOV/RESEARCH/AAQS/CAAQS/CAAQS/HTM) AND USEPA, 2012 (WWW.EPA.GOV/AIR/CRITERIA/HTML)

In 1997, new national standards for fine particulate matter diameter 2.5 microns or less ($PM_{2.5}$) were adopted for 24-hour and annual averaging periods. The current PM_{10} standards were to be retained, but the method and form for determining compliance with the standards were revised.

The State of California regularly reviews scientific literature regarding the health effects and exposure to PM and other pollutants. On May 3, 2002, CARB staff recommended lowering the level of the annual standard for PM_{10} and establishing a new annual standard for $PM_{2.5}$. The new standards became effective on July 5, 2003, with another revision on November 29, 2005.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination.

Existing air quality concerns within the Project area is related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles which account for 70 percent of the ozone in the region. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the state as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone (O_3), carbon monoxide (CO), and nitrogen dioxide (NO_2) as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide (SO_2), areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used. Sacramento County has a state and federal designation of Nonattainment for Ozone, PM_{10}, and $PM_{2.5}$, and is either Unclassified or Attainment for all other criteria pollutants. **Table 3.2-2** presents the state and nation attainment status for Sacramento County.

TABLE 3.2-2: STATE AND NATIONAL ATTAINMENT STATUS

CRITERIA POLLUTANTS	*STATE DESIGNATIONS*	*NATIONAL DESIGNATIONS*
Ozone	Nonattainment - Serious	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	
Lead	Attainment	
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	

SOURCES: CALIFORNIA AIR RESOURCES BOARD (2013).

Sacramento Valley Air Basin Monitoring

The SVAB consists of 13 counties covering approximately 13,700 square miles. The SVAB stretches about 200 miles long in a north-south direction, and has a maximum width of about 150 miles, although the width of the valley floor only averages about 50 miles. Topography in the SVAB varies drastically with valley floor, rolling foothills, and mountains. Elevations range from 40 feet to over 9,000 feet.

CARB maintains numerous air quality monitoring sites throughout each County in the Air Basin to measure ozone, $PM_{2.5}$, and PM_{10}. It is important to note that the federal ozone 1-hour standard was revoked by the EPA and is no longer applicable for federal standards. Data obtained from the monitoring sites throughout the SVAB between 2008 and 2010 is summarized in **Tables 3.2-3 through 3.2-5**.

TABLE 3.2-3 SVAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY - OZONE 2008-2010

YEAR	DAYS > STANDARD				1-HOUR OBSERVATIONS			8-HOUR AVERAGES				YEAR COVERAGE	
	STATE		NATIONAL			STATE	NAT'L	STATE		NATIONAL			
	1-HR	8-HR	1-HR	'08 8-HR	MAX.	D.V.[1]	D.V.[2]	MAX.	D.V.[1]	MAX.	'08 D.V.[2]	MIN	MAX
2010	15	46	0	29	0.124	0.13	0.132	0.112	0.116	0.112	0.102	85	100
2009	30	65	1	45	0.247	0.13	0.132	0.104	0.116	0.104	0.100	86	100
2008	41	78	9	54	0.166	0.14	0.133	0.123	0.116	0.123	0.102	0	100

NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. THE NATIONAL 1-HOUR OZONE STANDARD WAS REVOKED IN JUNE 2005 AND IS NO LONGER IN EFFECT. STATISTICS RELATED TO THE REVOKED STANDARD ARE SHOWN IN ITALICS. D.V. [1] = STATE DESIGNATION VALUE. D.V. [2]= NATIONAL DESIGN VALUE.

SOURCES: CALIFORNIA AIR RESOURCES BOARD AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM (ADAM) AIR POLLUTION SUMMARIES, 2013.

TABLE 3.2-4: SVAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY - PM $_{2.5}$ 2008-2010

YEAR	EST. DAYS > NAT'L '06 STD.	ANNUAL AVERAGE		NAT'L ANN. STD. D.V.[1]	STATE ANNUAL D.V.[2]	NAT'L '06 STD. 98TH PERCENTILE	NAT'L '06 24-HR STD. D.V.[1]	HIGH 24-HOUR AVERAGE		YEAR COVERAGE	
		NAT'L	STATE					NAT'L	STATE	MIN.	MAX.
2010	1.1	8.8	10.9	11.5	19	29.0	51	72.2	92.3	46	100
2009	8.9	10.7	15.5	12.4	19	38.7	59	49.8	71.7	78	100
2008	36.5	16.4	18.9	13.4	19	97.1	69	200.2	200.2	83	100

NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. D.V. [1] = STATE DESIGNATION VALUE. D.V. [2]= NATIONAL DESIGN VALUE

SOURCES: CALIFORNIA AIR RESOURCES BOARD AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM (ADAM) AIR POLLUTION SUMMARIES, 2013.

TABLE 3.2-5: SVAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY - PM $_{10}$ 2008-2010

YEAR	EST. DAYS > STD.		ANNUAL AVERAGE		3-YEAR AVERAGE		HIGH 24-HR AVERAGE		YEAR COVERAGE
	NAT'L	STATE	NAT'L	STATE	NAT'L	STATE	NAT'L	STATE	
2010	0.0	12.2	20.5	21.0	26	33	87.4	87.4	100
2009	0.0	18.4	25.6	26.4	28	33	76.0	76.0	100
2008	6.6	68.7	32.9	33.4	28	33	236.7	232.0	100

NOTES: THE NATIONAL ANNUAL AVERAGE PM$_{10}$ STANDARD WAS REVOKED IN DECEMBER 2006 AND IS NO LONGER IN EFFECT. AN EXCEEDANCE IS NOT NECESSARILY A VIOLATION. STATISTICS MAY INCLUDE DATA THAT ARE RELATED TO AN EXCEPTIONAL EVENT. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. NATIONAL STATISTICS ARE BASED ON STANDARD CONDITIONS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA.

SOURCES: CALIFORNIA AIR RESOURCES BOARD AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM (ADAM) AIR POLLUTION SUMMARIES, 2013.

3.2.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. CARB is the state agency that is responsible for preparing the California SIP.

Transportation Conformity Analysis

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and the EPA adopted implementing regulations in 1997. See §176 of the FCAA (42 U.S.C. §7506) and 40 CFR Part 93, Subpart A. Transportation conformity serves much the same purpose as general

conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas. Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the project, such as the Metropolitan Planning Organization, the Council of Governments, or a federal agency. The agency making the determination is also responsible for all the requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One particular aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

STATE

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the state. Rather than mandating the use of specific technology or the reliance on a specific fuel, the CARB's motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations which required auto manufacturers to phase in less polluting vehicles.

California Clean Air Act

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. CARB is the agency responsible for administering the CCAA. CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are similar to the federal standards.

Air Quality Standards

NAAQS are determined by the EPA. The standards include both primary and secondary ambient air quality standards. Primary standards are established with a safety margin. Secondary standards are more stringent than primary standards and are intended to protect public health and welfare. States have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards.

Federal and state ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM_{10}) and lead. In addition, California has created standards for pollutants that are not covered by federal standards. The state and federal primary standards for major pollutants are shown in Table 3.2-1.

Tanner Air Toxics Act

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB can designate a substance as a TAC. To date, ARB has identified more than 21 TACs and has adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the ARB list of TACs. Once a TAC is identified, ARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate BACT to minimize emissions.

The AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. ARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, ARB adopted a new public-transit bus-fleet rule and emission standards for new urban buses. These rules and standards provide for (1) more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Upcoming milestones include the low-sulfur diesel-fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide.

LOCAL

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District (SMAQMD) coordinates the work of government agencies, businesses, and private citizens to achieve and maintain healthy air quality for the Sacramento area, including the City of Elk Grove. SMAQMD develops market-based

programs to reduce emissions associated with mobile sources, processes permits, ensures compliance with permit conditions and with SMAQMD rules and regulations, and conducts long-term planning related to air quality.

As a nonattainment area, the region is also required to submit rate-of-progress milestone evaluations in accordance with the CAAA. These milestone reports include compliance demonstrations that the requirements have been met for the Sacramento nonattainment area. The air quality attainment plans and reports present comprehensive strategies to reduce ROG, NOX, and PM10 emissions from stationary, area, mobile, and indirect sources. Such strategies include the adoption of rules and regulations; enhancement of CEQA participation; implementation of a new and modified indirect source review program; adoption of local air quality plans; and stationary-, mobile-, and indirect-source control measures.

Sacramento Area Regional Ozone Attainment Plan

The greater Sacramento region is designated nonattainment for both federal and State and ozone standards. The federal 8-hour ozone regulations require that areas classified as serious or above submit a reasonable further progress (RFP) demonstration plan that shows a minimum of 18 percent volatile organic compound (and/or NOx) emission reductions over the first six years following the 2002 baseline year and then an average of 3 percent reductions per year for each subsequent three-year period out to the attainment year. The Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan includes the information and analyses to fulfill Clean Air Act requirements for demonstrating RFP toward attaining the 8-hour ozone National Ambient Air Quality Standards (NAAQS) for the Sacramento region through 2011. In addition, this plan establishes an updated emissions inventory and maintains existing motor vehicle emission budgets for transportation conformity purposes. The plan indicates that despite meeting the 2011 progress target, the Sacramento region cannot meet the 2013 attainment date for serious nonattainment areas. Section 181(b)(3) of the CAA permits a state to request that the USEPA reclassify or "bump up" a nonattainment area to a higher classification and extend the time allowed for attainment. This bump-up process is appropriate for areas that must rely on longer-term strategies to achieve the emission reductions needed for attainment. Therefore, the air districts in the Sacramento region submitted a letter to CARB in February 2008 to request a voluntary reclassification (bump-up) of the Sacramento federal nonattainment area from a serious to a severe 8-hour ozone nonattainment area with an extended attainment deadline of June 15, 2019. On May 5, 2010, the USEPA approved the request effective June 4, 2010.

Sacramento Area Regional PM_{10} Attainment Plan

The greater Sacramento region is designated nonattainment for both federal and State PM_{10} and $PM_{2.5}$ standards. SMAQMD has prepared the PM_{10} Implementation/Maintenance Plan and Re-Designation Request for Sacramento County in compliance with the federal CAA requirements pertaining to PM_{10} nonattainment areas. The purpose of this plan is to fulfill the requirements for the USEPA to re-designate the County from nonattainment to attainment of the PM_{10} NAAQS by preparing the following plan elements and tasks:

- Document the extent of the PM_{10}problem in Sacramento County.

- Determine the emission inventory sources contributing to the PM10 problem.
- Identify the appropriate control measures that achieved attainment of the PM10 NAAQS.
- Demonstrate maintenance of the PM10 NAAQS.
- Request formal re-designation to attainment of the PM10 NAAQS.

SMAQMD has also adopted various rules and regulations pertaining to the control of emissions from area and stationary sources. Some of the more pertinent regulatory requirements applicable to the proposed SDMP are identified as follows:

- **Rule 402: Nuisance.** The purpose of this rule is to limit emissions which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause or have natural tendency to cause injury or damage to business or property.
- **Rule 403: Fugitive Dust.** The purpose of this rule is to require that reasonable precautions be taken so as not to cause or allow the emissions of fugitive dust from non-combustion sources from being airborne beyond the property line from which the emission originates.

3.2.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on the environment associated with air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people.

IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: Potential to conflict with or obstruct implementation of the applicable air quality plan. (less than significant)

CEQA requires lead agencies to determine whether a project is consistent with all applicable air quality plans. The most current plan applicable to Elk Grove is the Sacramento Regional Ozone Attainment Plan (OAP) and the Sacramento Area Council of Governments' (SACOG's) Metropolitan Transportation Plan (MTP), which includes growth principles from the Preferred Blueprint Scenario. To evaluate plan consistency with the regional OAP and MTP, the lead agency must consider the following:

- The plan's consistency with both OAP and MTP population growth projections;
- The relationship between the plan's projected vehicle miles traveled (VMT) and population growth (i.e., whether the two projections are proportional, or whether the VMT increases at a slower rate than population, indicating a successful mode shift); and
- The extent to which the plan implements OAP transportation control measures.

SACOG prepares the population growth projections for their MTP/SCS based, in part, on a Regional Housing Needs Allocation (RHNA) and a Regional Housing Needs Plan (RHNP). These state-mandated documents allocate a projected share of the regional determination to each of the cities and counties in SACOG's region. The RHNA establishes the total number of housing units that each city and county must plan for within the eight-year planning period. Based on the adopted RHNA, each city and county must update its housing element to demonstrate how the jurisdiction will meet the expected growth in housing need over the eight-year planning period. SACOG coordinated its MTP/SCS with the RHNA projection. Ultimately the population projection developed by SACOG is used to develop the total vehicle miles traveled (VMT) for the region, which is modeled against the budget contained in the OAP. If the VMT and associated emissions are within the OAP budget, the MTP/SCS is determined to conform to the applicable State Implementation Plan (SIP). SACOG performed a conformity analysis and has determined that the MTP/SCS conforms to the SIP.

The Project has been prepared in response to the RHNA allocation issued by SACOG. The Project does not approve or entitle development nor does it require development. The Project presents the City's plan to accommodate housing consistent with the RHNA allocation issued by SACOG, as required by state law. The Project identifies potential housing sites that exceed the City's RHNA allocation of 7,402 units. However, the potential housing sites will accommodate long-term growth in the City and are not anticipated to fully develop during the RHNA planning period. As discussed in Section 3.9, Population and Housing, the MTP/SCS does not identify population growth projections for the individual cities and counties in the region and the growth associated with the Project is similar to the projected growth rates anticipated in the MTP/SCS. The proposed change in land use designations and/or zoning on the opportunity sites would change the development potential of the opportunity sites, as shown in Table 2.0-2 in Section 2.0 Project Description. The Project would generally result in growth in areas in the City identified for future growth in the MTP/SCS. Compared to existing General Plan land use designations for the 42 opportunity sites, implementation of the Project would result in an increase of up to 4,875 housing units and 15,680 persons and would reduce potential employment by 2,058 employees when compared to the adopted General Plan. As previously stated, the Project provides for future housing and population growth in order to accommodate the City's RHNA allocation and thus is generally consistent with the MTP/SCS.

The Project is one of seven state-mandated General Plan elements. The majority of measures identified by the OAP and the MTP/SCS are directly related to transportation and air quality and, thus, are addressed in the Circulation Element, Air Quality and Conservation Element, and Sustainability Element of a General Plan, as well as the City's Climate Action Plan. State law requires the Project (Housing Element) to address specific housing needs, including energy

conservation in residential development. The Project includes H-6 Action 1, which requires the City to continue to promote and support energy efficiency in new construction by encouraging developers to utilize SMUD energy programs and other energy efficiency programs and to be consistent with the Sustainability Element of the General Plan and the City's Climate Action Plan. Additionally, Project includes H-6 Action 2, which requires the City to continue to encourage participation in SMUD's PV (photovoltaic) Pioneer program by issuing PV system permits at no charge upon SMUD's approval.

The Project would not cause the disruption, delay or otherwise hinder the implementation of any OAP or MTP/SCS control measure. The Project does not include any measures that would preclude or interfere with implementation of the OAP or MTP/SCS. The Project is consistent with the population projections utilized in the OAP and MTP/SCS. As such, implementation of the Project would have a **less than significant** impact relative to this topic.

Impact 3.2-2: Potential to violate an air quality standard or contribute substantially to an existing or projected air quality violation – Project Operations. (significant and unavoidable)

A main objective of the Housing Element is to meet the City's housing needs, including accommodating a variety of housing types and densities. Section 2.0 Project Description, identifies the proposed programs that would assist the City in addressing its housing needs. Implementation of the Housing Element and development of new housing in Elk Grove would for the most part be in currently urbanized neighborhoods and would occur on properties that are currently designated in the General Plan and zoned for development.

Many of the programs in the Housing Element will not affect air quality, including programs that commit the City to considering various housing related issues, but either do not require any specific action or the action associated with the program will be determined in the future. However, the City has a shortfall of sites to accommodate its very low and low income needs RHNA. As such, the City will amend the General Plan land use designations and/or zoning in order to accommodate the City's share of regional housing needs on up to 42 opportunity sites in the City. The acreage, location, existing General Plan land use designation, existing zoning, proposed General Plan land use designation, and proposed zoning for each site identified for a change in allowed land use is shown in Table 2.0-1 and depicted on Figure 2.0-3. Sites 2 through 7A would be rezoned from the existing zoning to RD-25, which, as proposed, will allow 20.1 to 30.0 dwelling units per acre. Sites C-1 through C-10, C-12 through C-37, and C-39 through C-41 would have the General Plan land use designation and/or zoning designation amended, as shown in Table 2.0-1. The Project would change allowed land uses on up to 353.5 acres, which is anticipated to accommodate up to 8,843 high density residential units based on historical densities; this represents an increase in 4,875 units over the adopted General Plan land use designations. Figure 2.0-3 in Section 2.0, Project Description, depicts the location of each site proposed for General Plan land use and/or zoning changes.

Table 3.2-6 compares daily, AM peak hour, and PM peak hour trip generation of the opportunity sites under the adopted General Plan to the Project using trip generation rates published in Trip Generation, 9th Edition (Institute of Transportation Engineers, 2012). As shown in Table 3.2-6, the Project is expected to increase daily, AM, and PM peak hour trip generation. The Project would result in an increase of 3,640 trips per day, 1,510 trip during the AM peak hour, and 220 trips during the PM peak hour. The larger increases in daily and AM peak hour trip generation are due primarily to converting sites with very low residential densities to higher density designation. In comparison, the PM peak hour trip generation does not increase as much due to the conversion of commercial sites to residential uses, since commercial (i.e., retail) land use generates trips at higher rates during the PM peak hour.

TABLE 3.2-6: TRIP GENERATION COMPARISON

Period		Current General Plan	Proposed Project	Difference (Current General Plan – Proposed Project)
Daily		55,300	58,240	2,940
Peak Hour	AM	2,880	4,070	1,190
	PM	5,090	5,130	40

Notes:
1 Trip rates from Trip Generation, 9th ed. (Institute of Transportation Engineers, 2012).
SOURCE: FEHR & PEERS, 2013

The California Emission Estimator Model (CalEEMod)™ (v.2013.2) was used to estimate operational emissions for the 42 opportunity sites. Table 3.2-7 shows the emissions, which include mobile source, area source, and energy emissions of criteria pollutants that would result from operations of residential housing at the 42 opportunity sites. The development of these 42 opportunity sites is not currently proposed; therefore, there is not a detailed application or other information concerning the construction schedule or operational date of these projects. For purposes of this analysis, the default model assumptions were used for the construction schedule (i.e. the 42 opportunity sites are developed and operational between 2014 and 2044). The full calculations, inputs, and assumptions are provided in Appendix B.

TABLE 3.2-7: OPERATIONAL EMISSIONS (UNMITIGATED)

	ROG	*NOx*	*PM10 TOTAL*	*PM2.5 TOTAL*
Summer (maximum daily lbs/day)				
Area	134.4759	4.8837	2.1878	2.1878
Energy	1.4371	12.2809	0.9929	0.9929
Mobile	437.5580	332.0206	194.6070	55.2410
Total	**573.4710**	**349.1852**	**197.7877**	**58.4216**
Winter (maximum lbs/day)				
Area	134.4759	4.8837	2.1878	2.1878
Energy	1.4371	12.2809	0.9929	0.9929
Mobile	477.9283	379.1376	194.6513	55.2817
Total	**613.8413**	**396.3022**	**197.8320**	**58.4624**

SOURCES: CALEEMOD (V.2013.2)

As shown in the table above, unmitigated operational ROG and NOx emissions exceed the 65 pound per day threshold of significance for ROG and NOx. The SMAQMD has determined that projects with emissions that exceed this threshold will have a significant impact relative to air quality emissions and they must implement all feasible mitigation measures.

Mitigation Measures

***Mitigation Measure 3.2-1**: As part of the City's design review and entitlement process, the City shall require subsequent development projects on the opportunity sites to comply with the City's Climate Action Plan and to prepare an Air Quality Mitigation Plan (AQMP) consistent with the requirements of SMAQMD. The AQMP shall include measures to reduce emissions for each subsequent project by 15%, or more if feasible. Measures may include, but are not limited to:*

- *Only natural gas burning fireplaces/hearths (i.e. no wood burning fireplaces/hearths shall be allowed).*
- *Only low VOC paint (interior and exterior) and cleaning products shall be used on the individual housing site.*
- *Residential dwellings shall be designed to exceed applicable Title 24 energy standards by 20%.*
- *Install high efficiency appliances (refrigerator, fans, washers).*
- *Streets shall be designed to maximize pedestrian access to transit stops.*
- *Provide for on-site road and off-site bus turnouts, passenger benches and shelters as demand and service routes warrant subject to review and approval by local transportation planning agencies.*
- *Safe and convenient bicycle and pedestrian paths/sidewalks connecting proposed residential uses to nearby trails, commercial land uses, and services.*
- *Ensure that the final design includes:*
    - *A walkable design/improved pedestrian network (i.e. walkways, paths, sidewalks, trails, etc.).*
    - *Destination accessibility (connectivity to/from project amenities).*
    - *Increase transit accessibility (ensure that the minimum distance to a transit/bus facility is .25 miles).*

Significance after Mitigation

Mitigation was input into the model to ensure that emissions are reduced to the extent possible in accordance with state and regional requirements. The California Emission Estimator Model (CalEEMod)™ (v.2013.2) was used to estimate operational emissions for the Project with the implementation of mitigation measures. Mitigation inputs included the following:

Area Source:

- only using natural gas burning fireplaces/hearths
- low VOC architectural coatings and cleaning supplies.

Energy Source

- Exceed Title 24 by 20%
- Install high efficiency appliances (refrigerator, fans, washers)

Table 3.2-8 shows the operational emissions, which include area, energy, and mobile source emissions that would result from operations of the Project with mitigation.

TABLE 3.2-8: OPERATIONAL EMISSIONS (MITIGATED)

	ROG	***NOx***	***PM10 TOTAL***	***PM2.5 TOTAL***
Summer (maximum daily lbs/day)				
Area	126.6759	4.8837	2.1878	2.1878
Energy	1.1991	10.2472	0.8285	0.8285
Mobile	436.9889	331.5763	194.2958	55.1530
Total	**564.8639**	**346.7072**	**197.3120**	**58.1692**
Percent Reduction	**1.50**	**0.71**	**0.24**	**0.43**
Winter (maximum lbs/day)				
Area	126.6759	4.8837	2.1878	2.1878
Energy	1.1991	10.2472	0.8285	0.8285
Mobile	477.2714	378.6261	194.3400	55.1937
Total	**605.1464**	**393.7570**	**197.3563**	**58.2100**
Percent Reduction	**1.42**	**0.64**	**0.24**	**0.43**

SOURCES: CALEEMOD (V.2013.2)

As shown in the table above, emissions are further reduced with the inclusion of these mitigation measures; however, the emissions are not reduced to below the thresholds of significance established by the SMAQMD. As such, implementation of the Project would have a ***significant and unavoidable*** impact relative to this topic.

Impact 3.2-3: Project construction has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation – Project Construction. (potentially significant)

As discussed under Impact 3.2-2, many of the programs in the Housing Element will not affect air quality, including programs that commit the City to considering various housing related issues, but either do not require any specific action or the action associated with the program will be determined in the future. However, the City has a shortfall of sites to accommodate its very low and low income needs RHNA as discussed under Impact 3.2-2. As such, the City will amend the General Plan land use designations and/or zoning in order to accommodate the City's share of regional housing needs on up to 42 opportunity sites in the City. The acreage, location, existing General Plan land use designation, existing zoning, proposed General Plan land use designation, and proposed zoning for each site identified for a change in allowed land use is shown in Table 2.0-1. The Project would change allowed land uses on 353.5 acres, which is anticipated to accommodate up to 8,843 units, an increase of approximately 4,875 units compared to the adopted General Plan land use designations. Figure 2.0-3 in Section 2.0, Project Description, depicts the location of each site proposed for General Plan land use and/or zoning changes.

Construction Activities/Schedule: Construction activities will consist of multiple phases over several years. These construction activities can be described as site improvements (grading,

underground infrastructure, and topside improvements) and vertical construction (building construction and architectural coatings).

Site Improvements: The exact construction schedule is largely dependent on the economic conditions of the region, the ability for the market to absorb the proposed residential units, and the property owner's desire to develop the property. For purposes of this analysis it is assumed that site improvements on the 42 opportunity sites are installed between 2014 through 2044 (Note: Absent a development plan for the 42 opportunity sites, the default construction schedule from CalEEMod was used for modeling.)

The site improvement phase of construction will begin with site preparation and demolition. This step will include the use of dozers, backhoes, and loaders to strip (clear and grub) all organic materials and the upper half-inch to inch of soil from the sites. Those sites that are developed will require demolition of the structures and improvements currently located on site. This task will generally take a month or less to complete on an individual site and will include vehicle trips from construction workers.

After the sites are prepared grading will begin. This activity will involve the use of excavators, graders, dozers, scrappers, loaders, and backhoes to move soil around the sites to create specific engineered grade elevations and soil compaction levels. Grading an individual site would likely take less than a month and will include vehicle trips from construction workers.

The next step involves the installation of underground infrastructure. This step will involve the use of excavators to dig trenches, place pipe and conduit, bury pipe and conduit, and compact trench soil. Underground infrastructure installation on an individual site would take approximately a month and will include vehicle trips from construction workers.

The last task is to install the topside improvements, which includes pouring concrete curbs, gutters, sidewalks, and driveway aprons and then paving of all streets and parking lots. This task will involve the use of pavers, paving equipment, and rollers and will take approximately a month on an individual site and will include vehicle trips from construction workers.

Building Construction/Architectural Coatings: Building construction involves the vertical construction of structures and landscaping around the structures. This task will involve the use of forklifts, generator sets, welders and small tractors/loaders/backhoes. The exact construction schedule is largely dependent on the economic conditions of the region, the ability for the market to absorb the proposed residential units, and the property owner's desire to develop the property. For purposes of this analysis it is assumed that building construction/architectural coatings at the 42 opportunity sites are installed between 2014 through 2044 (Note: Absent a development plan for the 42 opportunity sites, the default construction schedule from CalEEMod was used for modeling.). The actual absorption may be much longer or shorter, which would result in a variation in the daily emissions because construction would be either spread over an extended period of time, or shortened. Architectural coatings involve the interior and exterior painting associated with the structures. This task will generally begin four or five months after construction begins on the structure and will generally be completed with the completion of the building.

Construction Emissions: The Project is larger in scope and size then the SMAQMD's NOX Construction Screening Levels, therefore, a quantification of the maximum daily mass emissions of ROG, NOX, PM10, and PM2.5 that will be emitted by Project construction (expressed in pounds per day) has been performed. In addition, total emissions expressed in tons have been quantified. The California Emission Estimator Model (CalEEMod)™ (v.2013.2) was used to estimate construction emissions for the Project. **Table 3.2-9** shows the construction emissions for the construction years 2014 through 2045.

TABLE 3.2-9: CONSTRUCTION EMISSIONS (UNMITIGATED)

	ROG	NOx	PM10 TOTAL	PM2.5 TOTAL
Summer (maximum daily lbs/day)				
2014	4.8578	49.6113	2.6421	2.3904
2015	5.5481	56.9624	21.2925	12.8092
2016	6.7721	74.8858	21.1429	12.6715
2017	6.3667	69.6564	12.1438	6.6897
2018	54.0806	66.8572	31.9722	10.0188
2019	50.2426	60.7042	31.7217	9.7844
2020	46.4967	54.0935	31.4973	9.5745
2021	43.9437	47.4975	31.2976	9.3871
2022	42.0227	42.9008	31.1436	9.2424
2023	40.1554	39.3536	31.0137	9.1201
2024	38.7097	37.8683	30.9318	9.0422
2025	37.4606	36.4205	30.8500	8.9647
2026	36.4587	35.9792	30.8530	8.9670
2027	35.5243	35.6079	30.8563	8.9696
2028	34.5987	35.2728	30.8587	8.9715
2029	33.6881	34.9705	30.8608	8.9731
2030	32.7684	30.2043	30.4852	8.6281
2031	31.9725	29.9630	30.4869	8.6293
2032	31.2355	29.7535	30.4885	8.6304
2033	30.5955	29.5723	30.4898	8.6312
2034	29.8370	29.4143	30.4908	8.6318
2035	29.0682	28.5166	30.4339	8.5745
2036	1.2123	7.1510	25.5318	6.3348
2037	1.2123	7.1510	25.5318	6.3348
2038	1.2123	7.1510	25.5318	6.3348
2039	1.2123	7.1510	25.5318	6.3348
2040	1.1926	6.8826	25.5152	6.3182
2041	1.1926	6.8826	25.5152	6.3182
2042	1.1926	6.8826	25.5152	6.3182
2043	0.9902	3.5998	0.2130	0.1381
2044	0.9902	3.5998	4.6480	1.1465
2045	0.1149	0.7270	4.6480	1.1465
Total	**712.9256**	**1,013.2441**	**802.1347**	**244.0264**
Winter (maximum lbs/day)				
2014	4.8890	49.6279	2.6421	2.3904
2015	5.5825	56.9800	21.2925	12.8092
2016	6.8074	74.9032	21.1429	12.6715
2017	6.3992	69.6719	12.1438	6.6897
2018	60.8092	71.6455	31.9800	10.0259
2019	56.5688	65.0437	31.7288	9.7909
2020	52.3906	57.9596	31.5034	9.5801
2021	49.5784	50.9278	31.3030	9.3921
2022	47.4820	46.0487	31.1488	9.2472
2023	45.4403	42.2418	31.0174	9.1235
2024	43.8711	40.6410	30.9355	9.0456
2025	42.4907	39.0965	30.8537	8.9681
2026	41.3722	38.5723	30.8566	8.9704
2027	40.3278	38.1304	30.8599	8.9730
2028	39.2850	37.7313	30.8624	8.9749
2029	38.2745	37.3703	30.8644	8.9764

	ROG	NOx	PM10 TOTAL	PM2.5 TOTAL
2030	37.2729	32.5510	30.4888	8.6314
2031	36.4051	32.2609	30.4905	8.6326
2032	35.6014	32.0099	30.4921	8.6337
2033	34.8940	31.7934	30.4934	8.6345
2034	34.0232	31.6056	30.4944	8.6351
2035	33.1532	30.6835	30.4375	8.5778
2036	1.2123	7.1510	25.5318	6.3348
2037	1.2123	7.1510	25.5318	6.3348
2038	1.2123	7.1510	25.5318	6.3348
2039	1.2123	7.1510	25.5318	6.3348
2040	1.1926	6.8826	25.5152	6.3182
2041	1.1926	6.8826	25.5152	6.3182
2042	1.1926	6.8826	25.5152	6.3182
2043	0.9902	3.5998	0.2130	0.1381
2044	0.9902	3.5998	4.6480	1.1465
2045	0.1149	0.7270	4.6480	1.1465
Total	**803.4405**	**1,064.6744**	**802.2134**	**244.0988**

SOURCES: CALEEMOD (V.2011.1.1)

NOx Emissions Analysis: The SMAQMD has established a NOx construction threshold of 85 pounds/day. If the project's maximum daily NOx emissions will exceed the SMAQMD's threshold of significance for construction-generated NOx, the Project will have a significant impact on air quality and all feasible mitigation are required to be implemented to reduce NOx emissions. As shown in **Table 3.2-9** above, based on a default construction schedule the NOx emissions do not exceed the 85 pounds/day threshold. However, it is very possible that there will be years during buildout of the 42 opportunity sites that do not occur according to the default schedule and higher construction rates may occur. Higher rates of construction would increase the emissions in that particular year above the levels reflected in the default construction schedule. As such, it is possible that in specific years an exceedance of the SMAQMD's 85 pound per day threshold of significance could occur. This is a ***potentially significant*** impact.

Mitigation Measures

Mitigation Measure 3.2-2: *To reduce construction related emissions, the City shall require the project applicant of the individual housing sites to implement the following SMAQMD Basic Construction Emissions Control Measures:*

- *The following practices are considered feasible for controlling fugitive dust from a construction site. Control of fugitive dust is required by SMAQMD Rule 403 and enforced by SMAQMD staff.*
    - *Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.*
    - *Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.*

- *Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.*
- *Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).*
- *All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.*

- *The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel powered equipment. The California Air Resources Board enforces the idling limitations.*
  - *Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.*
- *Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.*
  - *Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.*

Mitigation Measure 3.2-3: *To reduce construction related emissions, the City shall require the project applicant of the individual housing sites to implement the following SMAQMD Enhanced Emission Control Measures:*

- *The project shall provide a plan for approval by the lead agency and SMAQMD demonstrating that the heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The SMAQMD's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.*
- *The project representative shall submit to the lead agency and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine model year, and*

projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. The SMAQMD's Model Equipment List can be used to submit this information.

- *The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency and SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD, state or federal rules or regulations.*

- *If at the time of construction, the SMAQMD has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with the SMAQMD prior to construction will be necessary to make this determination.*

Significance after Mitigation (NOx Emissions)

For projects that will generate maximum daily NOx emissions that exceed the SMAQMD's threshold of significance, even with implementation of the Basic Construction Emission Control Practices, the SMAQMD recommends implementation of the Enhanced Exhaust Control Practices for off-road construction equipment. The SMAQMD considers implementation of the Enhanced Exhaust Control Practices to achieve a 20% reduction for NOx from off-road construction equipment exhaust when compared to the state fleet average. With the implementation of Enhanced Exhaust Control Practices the NOx emissions would be required to drop a level that is below the SMAQMD threshold of significance. The following mitigation measures require the implementation of the SMAQMD Basic Constriction Emission Control Measures and the Enhanced Exhaust Control Practices to achieve a 20% reduction in NOx. With the implementation of the following mitigation measures the Project would have a ***less than significant*** impact related to construction NOx emissions.

PM Emissions Analysis: During typical construction projects the majority of particulate matter emissions (i.e., PM_{10} and $PM_{2.5}$) are generated in the form of fugitive dust during ground disturbance activities, most of which is generated during the grading phase. PM emissions are also

generated in the form of equipment exhaust and reentrained road dust from vehicle travel on paved and unpaved surfaces.

The SMAQMD recommends that PM_{10} emissions be addressed as a localized pollutant. Thus, the SMAQMD considers PM_{10} emissions to be a significant impact at the project-level if they will exceed the SMAQMD's concentration-based threshold of significance at an off-site receptor location. Because $PM_{2.5}$ is a subset of PM_{10}, the SMAQMD assumes that construction projects that do not generate concentrations of PM_{10} that exceed the SMAQMD's concentration-based threshold of significance will also be considered less-than-significant for $PM_{2.5}$ impacts.

The SMAQMD has a screening level of analysis that can be performed to determine if PM modeling is necessary. Projects that meet the following two criteria are considered by the SMAQMD to not have the potential to exceed or contribute to the SMAQMD's concentration-based threshold of significance for PM_{10} (and, therefore, $PM_{2.5}$) at an off-site location. Thus, the PM_{10} emission concentrations generated by construction projects that meet the criteria shall be considered a less-than-significant impact to air quality. The two SMAQMD screening criteria are as follows:

- A project will implement all Basic Construction Emission Control Practices, and
- The maximum daily disturbed area (i.e., grading, excavation, cut and fill) will not exceed 15 acres.

While the Project would meet the first criterion, the Project has the potential to exceed the maximum daily disturbed area identified by the second criterion. The grading phase of construction that could occur under subsequent projects on the 42 opportunity sites consists of approximately 353.5 acres. However, only four of the opportunity sites are larger than 15 acres. It is anticipated that the grading activities on the four sites larger than 15 acres could require disturbance of between 10 and 15 acres per day in order to effectively grade the site. This is a potentially significant impact.

Mitigation Measures

Mitigation Measure 3.2-4: *To reduce construction related emissions, the City shall require grading activities on the individual opportunity sites to have a maximum daily disturbed area (i.e., grading, excavation, cut and fill) that does not exceed 15 acres.*

Significance after Mitigation (PM10 Emissions)

Mitigation Measures 3.2-2 and 3.2-3 will require the implementation of all Basic and Enhanced Construction Emission Control Practices. Mitigation Measure 3.2-4 requires the maximum daily site disturbance area to not exceed 15 acres. Implementation of the Project with the mitigation measures would have a ***less than significant*** impact related to construction PM emissions.

Impact 3.2-4: The Project has the potential to have carbon monoxide hotspot impacts. (less than significant)

Project traffic would increase concentrations of carbon monoxide along streets providing access to the opportunity sites. Carbon monoxide is a local pollutant (i.e., high concentrations are normally only found very near sources). The major source of carbon monoxide, a colorless, odorless,

poisonous gas, is automobile traffic. Elevated concentrations (i.e. hotspots), therefore, are usually only found near areas of high traffic volume and congestion.

The SMAQMD recommends utilizing a screening approach for analyzing CO concentrations for potentially significant impacts. The methodology provides lead agencies with a conservative indication of whether project-generated vehicle trips will result in the generation of CO emissions that contribute to an exceedance of the thresholds of significance. The SMAQMD's recommended screening criteria are divided into two tiers, as described below. The screening criteria have been developed to help lead agencies analyze potential CO impacts.

First Tier: The Project will result in a less-than-significant impact to air quality for local CO if:

- Traffic generated by the Project will not result in deterioration of intersection level of service (LOS) to LOS E or F; and
- The Project will not contribute additional traffic to an intersection that already operates at LOS of E or F.

For the Project, the first tier is not met because the Project would contribute to unacceptable roadway operations (i.e., LOS E or F), as described in Section 3.10. The screening approach requires that if the first tier of screening criteria is not met then the second tier of screening criteria shall be examined.

Second Tier: If all of the following criteria are met, the Project will result in a less-than-significant impact to air quality for local CO.

- The Project will not result in a study area (see Figure 3.11-1) intersection experiencing more than 31,600 vehicles per hour;
- The Project will not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway; or other locations where horizontal or vertical mixing of air will be substantially limited; and
- The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (as identified by the EMFAC or CalEEMod models).

The Project meets all three criteria of the second tier. First, the traffic analysis shows that study area roadways and intersections would be well below the 31,600 vehicle per hour threshold (see Table 3.11-4). Secondly, the Project does not include requirements for a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway; or other locations where horizontal or vertical mixing of air will be substantially limited. Lastly, the mix of vehicle types under the Project is not anticipated to be substantially different from the County average (Fehr and Peers, 2013).

The traffic study for the Project examined Level of Service (LOS) for roadway affected by the Project. No roadways are forecast to operate at an unacceptable LOS E or worse with the addition of the Project. The SMAQMD's screening approach for analyzing CO concentrations was used to analyze CO impacts for the Project. Since the Project is within an attainment area for carbon monoxide (ambient air quality standards are currently attained), in an area with low background

concentrations, and meets the SMAQMD second tier criteria, changes in carbon monoxide levels resulting from the Project would not result in violations of the ambient air quality standards and would represent a **less than significant** impact.

Impact 3.2-5: The Project has the potential for public exposure to toxic air contaminants. (potentially significant)

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

Mobile Source Air Toxics: Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources. In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment. These are acrolein, benzene, 1,3-butidiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter.

The 2007 EPA rule requires controls that will dramatically decrease Mobile Source Air Toxics (MSAT) emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (VMT) increases by 145 percent, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050. California maintains stricter standards for clean fuels and emissions compared to the national standards, therefore it is expected that MSAT trends in California will decrease consistent with or more than the U.S. EPA's national projections.

Currently, the California Air Resources Board monitors toxics throughout northern California from 17 monitoring sites, all of which are located in areas with major transportation routes. There is currently no toxic air monitoring sites located in Elk Grove. The closest toxic air monitoring site to Elk Grove is in the City of Roseville.

Air toxics are of concern in areas with major transportation routes where there is a high volume of large diesel truck trips. The Project is not located adjacent to major transportation route. The closest major transportation routes in Elk Grove include the SR-99 and I-5.

The California Air Resources Board (CARB) published the *Air Quality and Land Use Handbook: A Community Health Perspective* (2007) to provide information to local planners and decision-makers about land use compatibility issues associated with emissions from industrial, commercial

and mobile sources of air pollution. The CARB Handbook indicates that mobile sources continue to be the largest overall contributors to the State's air pollution problems, representing the greatest air pollution health risk to most Californians. The most serious pollutants on a statewide basis include diesel exhaust particulate matter (diesel PM), benzene, and 1,3-butadiene, all of which are emitted by motor vehicles. These mobile source air toxics are largely associated with freeways and high traffic roads. Non-mobile source air toxics are largely associated with industrial and commercial uses. **Table 3.2-10** provides the California Air Resources Board minimum separation recommendations on siting sensitive land uses. While the Project does not propose any of the listed source categories, the Project would place sensitive land uses (residential dwellings) within 500 feet of a freeway with 100,000 vehicles/day.

TABLE 3.2-10: CARB MINIMUM SEPARATION RECOMMENDATIONS ON SITING SENSITIVE LAND USES

SOURCE CATEGORY	***ADVISORY RECOMMENDATIONS***
Freeways and High-Traffic Roads	• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.[1]
Distribution Centers	• Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	• Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	• Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	• Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	• Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro- ethylene	• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

SOURCES: AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE" (CARB 2005)

SMAQMD's publication *Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways* (March 2011) provides the following screening criteria to determine whether a proposed sensitive receptor would be at risk from proximity to a major roadway:

1. Determine if the nearest proposed sensitive receptor affected by the project is at least 500 feet from the nearest high traffic volume roadway (defined as a freeway, urban roadway with greater than 100,000 vehicles/day or rural roadway with 500,000 vehicles/day). If outside of the 500-foot distance, no further evaluation is recommended.

2. If the receptor is within the 500-foot screening distance, determine if the nearest sensitive receptor's increase in individual cancer risk is lower than the evaluation criterion. The most recent evaluation criterion identified by SMAQMD is 276/million (2011). If the cancer risk is lower, no further evaluation is recommended.

3. If the cancer risk is higher than the evaluation criterion, complete a site-specific health risk assessment (HRA).

In the City, SR-99 north of Elk Grove Boulevard has traffic volumes in excess of the 100,000 vehicles/day threshold. I-5 does not have daily trip levels in excess of the threshold. The opportunity sites within 500 feet of SR-99 north of Elk Grove Boulevard are: Sites 7A, C-34, C-35, C-39, and C-40. **Table 3.2-11** identifies the incremental cancer risk, based on Table 2 of SMAQMD's Recommended Protocol, of the sites within 500 feet of SR-99 north of Elk Grove Boulevard. Site C-34 exceeds the estimated cancer risk criterion.

TABLE 3.2-11: POTENTIAL INCREMENTAL CANCER RISK OF OPPORTUNITY SITES WITHIN 500 FEET OF ROADWAYS WITH 100,000 OR MORE DAILY TRIPS

	DISTANCE OF NEAREST POTENTIAL SENSITIVE RECEPTOR TO SR-99[1]	*PEAK AVERAGE DAILY TRIPS ON SR-99 SEGMENT*[2]	*ESTIMATED CANCER RISK*[3]	*RISK EXCEEDS EVALUATION CRITERION?*
7A	193	10,500	188	No
C-33	190	9,400	168	No
C-34	70	8,700	284	Yes
C-35	81	8,700	260	No
C-40	103	9,400	250	No

1: ANTICIPATES RESIDENTIAL DWELLINGS ARE SET BACK 25 FEET FROM THE PROPERTY LINE

2: 2012 TRAFFIC VOLUMES ON CALIFORNIA STATE HIGHWAYS (CALTRANS 2012)

3: INTERPOLATED FROM TABLE 2 OF RECOMMENDED PROTOCOL FOR EVALUATING THE LOCATION OF SENSITIVE LAND USES ADJACENT TO MAJOR ROADWAYS, SMAQMD 2011

SOURCE: DE NOVO PLANNING GROUP 2013

While Site C-34 exceeds the estimated cancer risk criterion, no development is proposed on these sites as part of the Project and no site-specific development plans are available to conduct a site-specific HRA. Development of sensitive receptors in locations that exceed the estimated cancer risk criterion could expose sensitive receptors to health risks associated with TACs. This is a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.2-5: *As part of the City's design review and entitlement process for Site C-34, the project applicant shall implement one of the following two measures:*

1) Setback all dwelling units and outdoor recreation areas a minimum of 80 feet from the nearest travel lane of SR-99.

2) *Retain a qualified professional to perform a health risk assessment to determine potential impacts associated with exposure to Toxic Air Contaminants. If Toxic Air Contaminant exposure levels exceed acceptable levels or indicate a significant increase in cancer risk, the health risk assessment shall identify measures that the development project will implement to reduce exposure to acceptable levels. Potential measures include development setbacks (e.g., increased distance from SR-99), setbacks of ground floor units (e.g., use ground floor adjacent SR-99 for parking, storage, office space) if upper floor units are at acceptable exposure levels, indoor air filtration equipment, and disclosure statements to prospective buyers or renters notifying them of predicted health risks and identifying the importance of maintenance of any specialized equipment and keeping windows and doors shut during peak traffic periods).*

Significance after Mitigation

Implementation of Mitigation Measure 3.2-5 would require a project that has the potential to exceed acceptable health risk levels for TACs to either place sensitive uses at an adequate distance from SR-99 to achieve acceptable health risks or to have a qualified professional assessment of the potential health risks on sensitive receptor and include site planning and/or project design measures specific to the subsequent project. This mitigation measure would reduce this potential impact to a **less than significant** level.

Impact 3.2-6: The Project would not create significant sources of objectionable odors. (less than significant)

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the SMAQMD. The general nuisance rule (Heath and Safety Code §41700) and SMAQMD's Rule 402 is the basis for the threshold.

Examples of facilities that are known producers of odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station, Painting/Coating Operations (e.g. auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plant. Residential land uses are not comparable to the types of uses that produce significant odors and are not associated with odor generation, but they do serve as sensitive receptors (SMAQMD 2011). The Project would not create or generate objectionable odors affecting a substantial number of people. This is considered a ***less than significant*** impact.

This page left intentionally blank.

This section describes the regulatory setting, regional biological resources, and impacts to biological resources that are likely to result from project implementation. No comments were received during the public review period for the Notice of Preparation regarding this topic.

3.3.1 ENVIRONMENTAL SETTING

BIOREGIONS

The City is located within the Sacramento Valley and Bay/Delta bioregions, and is adjacent to the Sierra (east), and the Bay/Delta (southwest). Figure 3.3-1 illustrates the boundaries of the bioregions within the region. A brief description of each bioregion is presented below.

Sacramento Valley Bioregion

The Sacramento Valley bioregion is a watershed of the Sierra Nevada that encompasses the northern end of the great Central Valley, stretching from Redding in the north to the southeast corner of Sacramento County. The bioregion is generally flat, and is rich in agriculture. The south-central portion of Sacramento County falls within this bioregion, which has a climate that is characterized by hot dry summers and cool wet winters. Oak woodlands, riparian forests, vernal pools, freshwater marshes, and grasslands provide the major natural vegetation of the bioregion. This bioregion is the most prominent wintering area for waterfowl, attracting significant numbers of ducks and geese to its seasonal marshes along the Pacific Flyway. Species include northern pintails, snow geese, tundra swans, sandhill cranes, mallards, grebes, peregrine falcons, heron, egrets, and hawks. Black-tailed deer, coyotes, river otters, muskrats, beavers, ospreys, bald eagles, salmon, steelhead, and swallowtail butterflies are some of the wildlife that are common in this bioregion.

Bay Area/Delta Bioregion

The Bay Area/Delta bioregion extends from the Pacific Ocean to the Sacramento Valley and San Joaquin Valley bioregions to the northeast and southeast, and a short stretch of the eastern boundary joins the Sierra Bioregion at Amador and Calaveras counties. The bioregion is bounded by the Klamath/North Coast on the north and the Central Coast Bioregion to the south. The Bay Area/Delta Bioregion is one of the most populous areas of the state, encompassing the San Francisco Bay Area and the Sacramento-San Joaquin River Delta. The water that flows through the Delta supplies two-thirds of California's drinking water, irrigating farmland, and sustaining fish and wildlife and their habitat. The bioregion fans out from San Francisco Bay in a jagged semi-circle that takes in all or part of 12 counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Joaquin, San Mateo, Santa Clara, Solano, Sonoma, and parts of Sacramento, and Yolo. The habitat types and vegetation of the Bay Area/Delta bioregion are as varied as the geography.

REGIONAL SETTING

Sacramento County lies in the middle of the Central Valley bordered by Contra Costa and San Joaquin counties on the south, Amador and El Dorado counties on the east, Placer and Sutter counties on the north, and Yolo and Solano counties on the west. The County extends from the low delta lands between the Sacramento and San Joaquin Rivers north to the foothills of the Sierra

Nevada Mountains. Plant communities predominant in this region include agricultural croplands, annual grassland, deltaic marsh (freshwater, brackish, and salt), horticultural/landscaped, fallow agricultural lands, oak woodland, open water (rivers, creeks, sloughs, etc.), riparian, and seasonal wetland.

LOCAL SETTING

The City's Planning Area, which encompasses approximately 93,560 acres including the City, is located within the USGS 7.5 minute Bruceville, Buffalo Creek, Carmichael, Clarksburg, Courtland, Elk Grove, Florin, Galt, and Sloughhouse quadrangles. Elevations within the Planning Area range from sea level to approximately 150 feet above mean sea level (MSL). Plant communities within the Planning Area include agricultural cropland, annual grassland, fallow agricultural land, horticultural/landscape, irrigation ditches, irrigated pastures, open waters, perennial and seasonal marshes, riparian woodlands, seasonal wetlands, and vernal pools. Land uses throughout the Planning Area vary; the predominant land uses include agricultural, commercial, and residential. Natural undisturbed open space is present in the western portion of the Planning Area within the Stone Lakes National Wildlife Refuge and in the eastern portion of the Planning Area within the Cosumnes River Preserve.

CALIFORNIA WILDLIFE HABITAT RELATIONSHIP SYSTEM

The California Wildlife Habitat Relationship (CWHR) System is a wildlife information system and predictive model for California's regularly-occurring birds, mammals, reptiles and amphibians. Within the City, agricultural communities provide the primary habitat for biological resources. While natural communities are limited in the region, they also provide some important habitat. According to the CWHR there are ten wildlife habitat classifications in Elk Grove out of 59 found in the state. The Elk Grove area is considered to have low biological diversity. The habitat classifications in Elk Grove include: Agriculture, Annual Grassland, Barren, Freshwater Emergent Wetland, Pasture, Riverine, Urban, Valley Foothill Riparian, Valley Oak Woodland, and Water. Below is a brief description of each habitat that is found in Elk Grove. Figure 3.3-2 illustrates the land cover types within Elk Grove.

Developed

Agricultural land may be defined broadly as land used primarily for production of food and fiber. This habitat can generally be broken into the following categories: cropland, dryland grain crops, irrigated grain crops, irrigated hayfield, irrigated row and field crops, rice, orchard - vineyard, deciduous orchard, evergreen orchard, and vineyard. On satellite imagery, the chief indications of agricultural activity are distinctive geometric field and road patterns on the landscape and the traces produced by livestock or mechanized equipment. However, pasture and other lands where such equipment is used infrequently may not show as well-defined shapes as other areas. The number of building complexes is smaller and the density of the road and highway network is much lower in Agricultural land than in Urban land.

Urban habitats are not limited to any particular physical setting. Three urban categories relevant to wildlife are distinguished: downtown, urban residential, and suburbia. The heavily-developed

downtown is usually at the center, followed by concentric zones of urban residential and suburbs. There is a progression outward of decreasing development and increasing vegetative cover. Species richness and diversity is extremely low in the inner cover. The structure of urban vegetation varies, with five types of vegetative structure defined: tree grove, street strip, shade tree/lawn, lawn, and shrub cover. A distinguishing feature of the urban wildlife habitat is the mixture of native and exotic species.

Herbaceous

Annual grassland habitat occurs mostly on flat plains to gently rolling foothills. Climatic conditions are typically Mediterranean, with cool, wet winters and dry, hot summers. The length of the frost free season averages 250 to 300 days (18 to 21 fortnights). Annual precipitation is highest in northern California.

Fresh emergent wetland habitats occur on virtually all exposures and slopes, provided a basin or depression is saturated or at least periodically flooded. They are most common on level to gently rolling topography. They are found in various depressions or at the edge of rivers or lakes. Soils are predominantly silt and clay, although coarser sediments and organic material may be intermixed. In some areas organic soils (peat) may constitute the primary growth medium. Climatic conditions are highly variable and range from the extreme summer heat to winter temperatures well below freezing.

Pastures are planted on flat and gently rolling terrain. Flat terrain is irrigated by the border and check method of irrigation, except on sandy soils or where water supplies are limited. Pastures established on sandy soils or hills are sprinklered. Hilly lands also use wild flooding; that is, ditches that follow the grade along ridges and hillsides, where water is released at selected points along the ditch. Climate influences the length of growing season. For example, pastures at higher elevations or in the north have a shorter growing season.

Hardwood Woodland

Valley-foothill riparian habitats are found in valleys bordered by sloping alluvial fans, slightly dissected terraces, lower foothills, and coastal plains. They are generally associated with low velocity flows, flood plains, and gentle topography. Valleys provide deep alluvial soils and a high water table. The substrate is coarse, gravelly or rocky soils more or less permanently moist, but probably well aerated. Frost and short periods of freezing occur in winter (200 to 350 frost-free days). This habitat is characterized by hot, dry summers, mild and wet winters. Temperatures range from 75 to 102 F in the summer to 29 to 44 F in the winter. Average precipitation ranges from 6-30 inches, with little or no snow. The growing season is 7 to 11 months.

Valley oak woodland habitat occurs in a wide range of physiographic settings but is best developed on deep, well-drained alluvial soils, usually in valley bottoms. Most large, healthy valley oaks are probably rooted down to permanent water supplies. Stands of valley oaks are found in deep sills on broad ridge-tops in the southern Coast Range. Where this type occurs near the coast, it is usually found away from the main fog zone. The climate is Mediterranean, with mild, wet winters and hot, dry summers.

Aquatic

Riverine habitats can occur in association with many terrestrial habitats. Riparian habitats are found adjacent to many rivers and streams. Riverine habitats are also found contiguous to lacustrine and fresh emergent wetland habitats. This habitat requires intermittent or continually running water generally originating at some elevated source, such as a spring or lake, and flows downward at a rate relative to slope or gradient and the volume of surface runoff or discharge. Velocity generally declines at progressively lower altitudes, and the volume of water increases until the enlarged stream finally becomes sluggish. Over this transition from a rapid, surging stream to a slow, sluggish river, water temperature and turbidity will tend to increase, dissolved oxygen will decrease and the bottom will change from rocky to muddy.

Lacustrine habitats are inland depressions or dammed riverine channels containing standing water. These habitats may occur in association with any terrestrial habitats, Riverine or Fresh Emergent Wetlands. They may vary from small ponds less than one hectare to large areas covering several square kilometers. Depth can vary from a few centimeters to hundreds of meters. Typical lacustrine habitats include permanently flooded lakes and reservoirs, intermittent lakes and ponds (including vernal pools) so shallow that rooted plants can grow over the bottom. Most permanent lacustrine systems support fish life; intermittent types usually do not.

Non-vegetated

Barren habitat is defined by the absence of vegetation. Any habitat with <2% total vegetation cover by herbaceous, desert, or nonwildland species and <10% cover by tree or shrub species is defined this way. The physical settings for permanently barren habitat represent extreme environments for vegetation. An extremely hot or cold climate, a near-vertical slope, an impermeable substrate, constant disturbance by either human or natural forces, or a soil either lacking in organic matter or excessively saline can each contribute to a habitat being inhospitable to plants.

SPECIAL-STATUS SPECIES

Special-status species are generally defined as: 1) species listed as a candidate, threatened, or endangered under the federal or state Endangered Species Act; 2) species considered rare or endangered under the California Environmental Quality Act; 3) species covered by the San Joaquin Multi-species Habitat and Open Space Conservation Plan; plants listed as rare under California Fish and Game Code; 4) plants considered "rare, threatened, or endangered in California" by the California Native Plant Society (Lists 1B and 2); 5) animal listed as "species of special concern" by the state; and 6) animals fully protected in California by the Fish and Game Code.

The following discussion is based on a background search of special-status species that are documented in the California Natural Diversity Database (CNDDB). The background search was regional in scope and focused on the documented occurrences within a five mile radius of the City. The CNDDB search revealed 23 special status species and two sensitive natural communities within the Planning Area, or the general vicinity. Table 3.3-1 provides a list of the special-status species. Figure 3.3-3 illustrates the locations for the documented occurrences.

TABLE 3.3-1: DOCUMENTED SPECIAL-STATUS SPECIES

SPECIES TYPE
INVERTEBRATE
California linderiella
midvalley fairy shrimp
valley elderberry longhorn beetle
vernal pool fairy shrimp
vernal pool tadpole shrimp
PLANT
Boggs Lake hedge-hyssop
dwarf downingia
legenere
Sanford's arrowhead
slender Orcutt grass
AMPHIBIAN/REPTILES
giant garter snake
western pond turtle

SPECIES TYPE
Bird
black-crowned night heron
burrowing owl
Cooper's hawk
double-crested cormorant
ferruginous hawk
great blue heron
great egret
merlin
Swainson's hawk
tricolored blackbird
white-tailed kite
Sensitive Natural Community
Great Valley Valley Oak Riparian Forest
Northern Hardpan Vernal Pool

SOURCE: CDFW CALIFORNIA NATURAL DIVERSITY DATABASE, OCTOBER 2013.

Special Status Plants

Boggs Lake hedge-hyssop (*Gratiola heterosepala*)

Boggs Lake hedge-hyssop (CE, CNPS List 1B) occurs in the margins of marshes and swamps, and vernal pools with clay soil conditions. This species is an annual herb that blooms from April through August (CNPS, 2001). Boggs Lake hedge-hyssop is recorded in the CNDDB within five miles of the Planning Area, including records within both the Cit y and the Planning Area (CNDDB, 2002). The perennial and seasonal marsh and vernal pool habitats in the City and Planning Area are considered suitable habitat for this species and, consequently, this species could occur within these habitats.

Dwarf Downingia (*Downingia pusilla*)

Dwarf downingia (CNPS List 2) is an annual herb that occurs in mesic valley and foothill grasslands within vernal pools. This species blooms from March through May (CNPS, 2001). This species is recorded in the CNDDB within five miles of the Planning Area, including records within both the City and Planning Area (CNDDB, 2002). Vernal pool habitat in the Planning Area is considered suitable habitat for this species. Therefore, this species could occur in the Planning Area.

Legenere (*Legenere limosa*)

Legenere (FSC, CNPS List 1B) is an annual herb that occurs in vernal pools in valley grasslands. This species blooms from April through June (CNPS, 2001). This species is recorded in the CNDDB within five miles of the Planning Area, including records within both the City and Planning Area (CNDDB, 2002). Vernal pool habitat in the Planning Area is considered suitable habitat for this species. Therefore, this species could occur in the City and the Planning Area.

Sanford's Arrowhead (*Sagittaria sanfordii*)

Sanford's arrowhead (FSC, CNPS List 1B) is a perennial herb that occurs within freshwater marshes and swamps. This species blooms from May through October (CNPS, 2001). There are numerous CNDDB records for this species within five miles of the Planning Area, including several records along creeks within the City (CNDDB, 2002). Freshwater marshes and swamps, including marshy

areas along creeks, within the Planning Area are considered suitable habitat for this species. Therefore, this species could occur in the City and in the Planning Area.

Slender Orcutt Grass (Orcuttia tenuis) and Critical Habitat

Slender orcutt grass (FT, CE, CNPS List 1B) is an annual herb that occurs within vernal pools. This species generally blooms from May through October (CNPS, 2001). Slender orcutt grass is recorded in the CNDDB within five miles of the Planning Area with records concentrated north of that area (CNDDB, 2002). Critical habitat for this species has been proposed within Sacramento County that includes portions of the Planning Area. Vernal pools within the Planning Area are considered suitable habitat for this species. Therefore, this species could occur in the Planning Area.

Special Status Animals

SPECIAL-STATUS INVERTEBRATES

California Linderiella, Midvalley Fairy Shrimp, Vernal Pool Fairy Shrimp, and Vernal Pool Tadpole Shrimp

Five species of freshwater invertebrates, California linderiella (FSC), conservancy fairy shrimp (FE), Midvalley fairy shrimp (FSC), vernal pool fairy shrimp (FT), and vernal pool tadpole shrimp (FE), have the potential to occur within the City and in the Planning Area. These species occur in seasonally inundated depressions such as vernal pools. The CNDDB lists several records of California linderiella, Midvalley fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp within the City and Planning Area vicinity; however, no records of conservancy fairy shrimp are recorded within five miles of the Planning Area. Proposed critical habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp occurs within Sacramento County and includes a portion of the Planning Area. Seasonal wetland and vernal pool habitats in the Planning Area are considered suitable habitats for these species. Therefore, these species could occur in the City and in the Planning Area.

Valley Elderberry Longhorn Beetle

The federally listed valley elderberry longhorn beetle is known to occur in association with its host plant, the elderberry (*Sambucus* sp.), especially for the larval stages. Because of the valley elderberry longhorn beetle dependence on its host plant, the USFWS considers the elderberry, which is a common species of riparian and upland habitats in the Central Valley, habitat for the valley elderberry longhorn beetle. This species is recorded in the CNDDB within five miles of the Planning Area. Additionally, elderberry shrubs have been identified in the City during field reconnaissance. Because suitable habitat for the valley elderberry longhorn beetle was observed in the City boundary, this species could occur in the Planning Area.

SPECIAL-STATUS AMPHIBIANS AND REPTILES

Giant Garter Snake

The giant garter snake is federally listed as threatened and is listed in California as threatened. This species occurs in vegetated canals, streams, and rivers throughout the Central Valley. Grassy banks and emergent vegetation are used for basking and high ground with burrows or crevices, which are protected from winter flooding, is used for hibernacula (winter retreats). Twelve occurrences

of giant garter snake are listed in the CNDDB within five miles of the Planning Area. The Lent Ranch Marketplace Draft EIR noted an observation of a giant garter snake within the City (City of Elk Grove, 2000). The irrigation ditches and the open water habitats in the City and in the Planning Area support suitable habitat for this species and, consequently, this species could occur within these habitats.

Western Pond Turtle

Western pond turtles are a federal species of concern and are a California Species of Special Concern. This species requires permanent, still to slow moving water with basking sites such as submerged logs, rocks, mats of floating vegetation or mud banks. One occurrence of this species is listed in the CNDDB within five miles of the Planning Area. The perennial marsh and open water habitats in the Planning Area support suitable habitat for this species and, consequently, this species could occur within these habitats in the City and Planning Area.

SPECIAL-STATUS BIRDS

Burrowing Owl

The burrowing owl (Athene cunicularia) is a federal species of concern and is a California Species of Special Concern. Burrowing owls inhabit open grasslands of the Central Valley. Typically, they nest in small colonies in abandoned ground squirrel burrows (CDFW, 1990). This species may also occur along canal banks. Several occurrences of burrowing owls are recorded in the CNNDB within five miles of the Planning Area. Suitable habitat occurs within the annual grassland and fallow agricultural land habitat in the Planning Area and, consequently, this species could use this habitat in the Planning Area.

Black-crowned night heron

The Black-crowned night heron (Nycticorax nycticorax), is a medium-sized heron that breeds in fresh and salt-water wetlands throughout much of the world. Black-crowned Night Herons nest in colonies on platforms of sticks in a group of trees, or on the ground in protected locations such as islands or reedbeds. Three to eight eggs are laid. The North American population winters in Mexico, the southern United States, Central America, and the West Indies, and the Old World birds winter in tropical Africa and southern Asia. This species is documented northwest of the city limits near Franklin Blvd. This species has the potential to be present at times within the Planning Area.

Double-crested Cormorant

The double-crested cormorant (Phalacrocorax auritus) is a colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. They nest along the coast on sequestered islets, usually on sloping surface, or in tall trees along lake margins. This species is documented along near I-5 northwest of the city limits. This species has the potential to be present at times within the Planning Area.

Great Blue Heron and Great Egret

Great blue heron (Ardea herodias) and great egret (Aredea alba) are classified as Sensitive Species by the California Department of Forestry and Fire Protection. These species are warranted special protection during timber operations. Great blue heron and great egret are common throughout

California in estuaries, fresh and saline emergent wetlands, slow moving streams and lakes, and irrigated croplands and pastures. These species nest in rookeries in large trees usually near water. One occurrence of great blue heron and several occurrences of great egret are recorded in the CNDDB within the Planning Area vicinity. Suitable foraging habitat for these species occurs within the eastern portion along the Cosumnes River and Deer Creek and within the western portion with the Stone Lakes National Wildlife Refuge of the Planning Area. Consequently, great blue heron and great egret could nest within the Planning Area.

Swainson's Hawk

Swainson's hawks are state listed as threatened. This species migrates into California in the spring to establish breeding territories for the summer and typically migrates out of California by the end of September. Swainson's hawks require isolated trees or riparian woodlands for nesting and nests are typically built within close proximity to suitable foraging habitat (agricultural field, annual grasslands, etc.). The Central Valley provides optimal nesting habitat for this species due to the abundance of agricultural fields and riparian woodlands, which this species uses for foraging and nesting, respectively. Several occurrences of Swainson's hawks were recorded in the CNDDB within five miles of the Planning Area. Additionally, three Swainson's hawks were recorded in the CNDDB within five miles of the Planning Area. There are known nesting sites within the City, with recent nesting occurring in the East Franklin Specific Plan area and the Laguna Ridge Specific Plan area. Suitable foraging and nesting habitat occurs within the City and in the Planning Area and, consequently, this species could occur here.

In 1994, the California Department of Fish and Wildlife (CDFW), formerly the California Department of Fish and Game, prepared a Staff Report describing mitigation of impacts to Swainson's hawks, which is a special-status bird species. Subsequent to preparation of this report, the County of Sacramento worked with staff of CDFW to develop an ordinance that provides a simplified means for individual development projects to mitigate impacts to Swainson's hawk foraging habitat on a region-wide basis. County Ordinance SCC No. 1093 requires payment of fees per acre of land developed within the County's Urban Services Boundary. Upon its incorporation, the City adopted this ordinance for mitigation purposes as set forth in Chapter 16.130 of the City of Elk Grove Code. The fee is calculated at ratio dependent upon the proximity of the project area to known Swainson's hawk nests, up to a maximum of ten miles.

The fees are used to purchase easements or fee title on property in the Cosumnes River and/or Deer Creek corridors. Where a project is located within one mile of known hawk nest sites, the impacts are not considered adequately mitigated by the payment of fees, and additional mitigation measures are required. These measures typically consist of providing protected habitat management land elsewhere in the region at a ratio of 1 acre per acre developed, if a portion of the land would be managed for agriculture; one-half acre per acre developed if all the habitat management land would be managed specifically for hawk habitat; or alternative mitigation of equal or greater protection as approved by the Environmental Services Division of the CDFW. However, this ordinance may be revised.

Tricolored Blackbird

Tricolored blackbirds (Agelaius tricolor) are a federal species of concern and are a California Species of Special Concern. This species is a common resident throughout the Central Valley and coastal areas south of Sonoma County. Tricolored blackbirds nest in emergent wetlands with dense cattails or tules, and also in thickets of blackberry and willow. No records of this species are listed with the CNDDB within the Planning Area vicinity; however, potential nesting habitat for this species occurs in the perennial and seasonal marsh habitat and adjacent to the irrigation ditches and open water habitats in the Planning Area.

Raptors and Other Migratory Birds

Raptor including Cooper's hawk (Accipiter cooperi), ferruginous hawk (*Buteo Regalis*), *merlin* (Falco columbarius) and white-tailed kite (Elanus caeruleus) are protected under the MBTA and Section 3503.5 of the California Fish and Game Code. These species are documented within the Planning Area. Suitable raptor habitat occurs in the Planning Area. Additionally, the Planning Area supports suitable raptor foraging habitat. A variety of other raptors, not documented in the CNDDB, are known to occur within the region.

Migratory birds forage and nest in multiple habitats such as annual grasslands and riparian oak woodlands. The nests of all migratory birds are protected under the MBTA, which makes it illegal to destroy any active migratory bird nest. Numerous migratory bird species have the potential to nest in the City and in the Planning Area.

SPECIAL-STATUS MAMMALS

Bats

Bats known to occur within the region include: fringed myotis (Myotis thysanodes), greater western mastiff bat (Eumops perotis californicus), long-eared myotis (Myotis evotis), long-legged myotis (Myotis volans), Pacific western big-eared bat (Corynorhinus townsendii townsendii), pale townsend's big-eared bat (Corynorhinus townsendii pallescens), small-footed myotis (Myotis ciliolabrum), and Yuma myotis (Myotis yumanensis). These species are of concern to the CDFW due to recent population declines. Habitat for bat species consists of foraging habitat, maternity roost sites, night roosting cover, and winter hibernacula. In general, the CDFW is most concerned about the loss of maternity roosting sites. These species forage over open water or land and could use open water and riparian habitats in the Planning Area to forage. Potential maternity and night roosting sites occur in abandoned outbuilding throughout the Planning Area and within the riparian habitats in the Planning Area. Therefore, these bat species could occur in the Planning Area.

SPECIAL-STATUS FISH

Anadromous Fishes and Other Aquatic Species

Several special-status anadromous fish and other aquatic fish species are known to occur, or could occur in the Planning Area vicinity (Sacramento River and Cosumnes River) including Central Valley fall/late fall-run Chinook salmon (Oncorhynchus tshawytscha), Central Valley spring-run Chinook salmon (Oncorhynchus tshawytscha), Central Valley winter-run Chinook salmon (Oncorhynchus

tshawytscha), Central Valley steelhead (Oncorhynchus mykiss), Delta smelt (Hypomesus transpacificus), green sturgeon (Acipenser medirostris), Pacific lamprey (Lampetra tridentata), river lamprey (Lampetra ayresi), and Sacramento splittail (Pogonichthys macrolepidotus). Because open water habitats within the City are not tributaries to the Sacramento River, Central Valley winter-run Chinook salmon, Central Valley steelhead, Delta smelt, green sturgeon, Kern brook lamprey, Pacific lamprey, river lamprey, and Sacramento splittail are unlikely to occur within the City. However, suitable habitat for Sacramento perch occurs within the City. Suitable habitat for special-status fish species occurs within the openwater habitat in the Planning Area. Consequently, these species could occur within the Planning Area.

3.3.2 REGULATORY SETTING

Regulatory agencies whose responsibility includes the oversight of the natural resources of the state and nation include the CDFW, USFWS, USACE, and the National Marine Fisheries Service. These agencies often respond to declines in the quantity of a particular habitat or plant or animal species by developing protective measures for those species or habitat type. The following is an overview of the federal, state and local regulations that are applicable to subsequent projects under the Project.

FEDERAL

Federal Endangered Species Act

The Federal Endangered Species Act (FESA), passed in 1973, defines an endangered species as any species or subspecies that is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Once a species is listed it is fully protected from a "take" unless a take permit is issued by the USFWS. A take is defined as the harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct, including modification of its habitat (16 USC 1532, 50 CFR 17.3). Proposed endangered or threatened species are those species for which a proposed regulation, but not a final rule, has been published in the Federal Register.

Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Federal Bald and Golden Eagle Protection Act

The Federal Bald and Golden Eagle Protection Act provides regulations to protect bald and golden eagles as well as their nests and eggs from willful damage or injury.

Clean Water Act – Section 404

Section 404 of the CWA regulates all discharges of dredged or fill material into waters of the U.S. Discharges of fill material includes the placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §323.2(f)].

Waters of the U.S. include lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows [33 C.F.R. §328.3(a)]. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

The USACE is the agency responsible for administering the permit process for activities that affect waters of the U.S. Executive Order 11990 is a federal implementation policy, which is intended to result in no net loss of wetlands.

Clean Water Act – Section 401

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the Regional Water Quality Control Board. To obtain the water quality certification, the Regional Water Quality Control Board must indicate that the proposed fill would be consistent with the standards set forth by the state.

Rivers and Harbors Act of 1899

The Rivers and Harbors Act prohibits the obstruction or alteration of any navigable water of the United States. Requires authorization from the Corps for any excavation or deposition of materials into these waters or for any work that could affect the course, location, condition, or capacity of rivers or harbors.

Department of Transportation Act - Section 4(f)

Section 4(f) has been part of Federal law since 1966. It was enacted as Section 4(f) of the Department of Transportation (DOT) Act of 1966 and set forth in Title 49 United States Code (U.S.C.), Section 1653(f). In January 1983, as part of an overall recodification of the DOT Act,

Section 4(f) was amended and codified in 49 U.S.C. Section 303. This law established policy on lands, wildlife and waterfowl refuges, and historic sites.

STATE

Fish and Game Code §2050-2097 - California Endangered Species Act

The California Endangered Species Act (CESA) protects certain plant and animal species when they are of special ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA established that it is State policy to conserve, protect, restore, and enhance endangered species and their habitats.

CESA requires state agencies to consult with the CDFW when preparing California Environmental Quality Act (CEQA) documents to ensure that the state lead agency actions do not jeopardize the existence of listed species. It directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species.

To be consistent with Federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

Fish and Game Code §1900-1913 California Native Plant Protection Act

In 1977 the State Legislature passed the Native Plant Protection Act (NPPA) in recognition of rare and endangered plants of the state. The intent of the law was to preserve, protect, and enhance endangered plants. The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants. The NPPA includes provisions that prohibit the taking of plants designated as "rare" from the wild, and a salvage mandate for landowners, which requires notification of the CDFW 10 days in advance of approving a building site.

Fish and Game Code §3503, 3503.5, 3800 - Predatory Birds

Under the California Fish and Game Code, all predatory birds in the order Falconiformes or Strigiformes in California, generally called "raptors," are protected. The law indicates that it is unlawful to take, posses, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort is considered a take. This generally includes construction activities.

Fish and Game Code §1601-1603 – Streambed Alteration

Under the California Fish and Game Code, CDFW has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or

stream. Private landowners or project proponents must obtain a "Streambed Alteration Agreement" from CDFW prior to any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFW may impose conditions to limit and fully mitigate impacts on fish and wildlife resources. These agreements are usually initiated through the local CDFW warden and will specify timing and construction conditions, including any mitigation necessary to protect fish and wildlife from impacts of the work.

Public Resources Code § 21000 - California Environmental Quality Act

The California Environmental Quality Act (CEQA) identifies that a species that is not listed on the federal or state endangered species list may be considered rare or endangered if the species meets certain criteria. Under CEQA public agencies must determine if a project would adversely affect a species that is not protected by FESA or CESA. Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e. candidate, or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency.

Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. Additionally, the California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. List 1A contains plants that are believed to be extinct. List 1B contains plants that are rare, threatened, or endangered in California and elsewhere. List 2 contains plants that are rare, threatened, or endangered in California, but more numerous elsewhere. List 3 contains plants where additional information is needed. List 4 contains plants with a limited distribution.

California Wetlands Conservation Policy

In August 1993, the Governor announced the "California Wetlands Conservation Policy" which ensures no net loss in wetlands and provides a framework to achieve a long-term increase in wetland acreage and value, reduce procedural complexity associated with state and federal programs, and focus on landowner incentive programs and cooperative planning efforts to conserve and restore wetlands. The Governor also signed Executive Order W-59-93, which incorporates the goals and objectives contained in the new policy and directs the Resources Agency to establish an Interagency Task Force to direct and coordinate administration and implementation of the policy.

Natural Community Conservation Planning Act

The Natural Community Conservation Planning Act provides long-term protection of species and habitats through regional, multi-species planning before the special measures of the CESA become necessary.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act authorizes the SWRCB to regulate state water quality and protect beneficial uses.

LOCAL

City of Elk Grove General Plan

The General Plan guides development within the City limits, and those areas outside the City limits that are contemplated for annexation. Policies CAQ-7 through CAQ-11 of the Conservation and Air Quality Element identify the City's policies and associated actions for the conservation of native and non-native habitats, plants, and animals. Policy CAQ-11 encourages preservation of areas where special-status plant species, special-status animal species, and critical habitat occur. CAQ-11 Action 1 establishes requirements for the evaluation and mitigation of impacts to special-status species and identifies that potentially significant impacts may be mitigated through replacement or restoration of habitat on- or off-site. Relevant General Plan policies and action items are listed below.

City of Elk Grove Swainson's Hawk Chapter 16.130

The Swainson's Hawk Ordinance, Chapter 16.130 of the Elk Grove Municipal Code, has been developed to provide individual projects with a mechanism to mitigate the loss of Swainson's hawk foraging habitat through either payment of a fee (for projects less than 40 acres) or preservation of suitable habitat (for projects of 40 acres or more). The fees collected by the City are earmarked for purchase and administration of suitable habitat for this species that has been determined by the CDFW to be suitable Swainson's hawk foraging habitat.

Tree Preservation and Protection Chapter 19.12

The Tree Preservation and Protection Ordinance was codified in Chapter 19.12 of the City Municipal Code and strives to protect and preserve landmark trees and trees of local importance with a single trunk 6 inches dbh or greater or a multi-trunk with a combined dbh of 6 inches or greater. Chapter 19.12 requires mitigation for the removal of landmark trees, trees of local importance, secured trees, and trees in the right-of-way or on City property. Mitigation may include on-site or off-site replacement, payment of an in-lieu fee, credit for existing smaller trees, and/or on-site or off-site relocation.

3.3.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on biological resources if it will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or codes protecting biological resources, such as Tree Preservation and Protection, Chapter 19.12;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

IMPACTS AND MITIGATION

Impact 3.3-1: Potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (no new impact and no increase in significance of impact)

The search of the CNDDB revealed documented occurrences of 23 special status species within City or general vicinity. In addition, there are two sensitive natural communities that are documented. Surveys of the 42 opportunity sites have not been performed; therefore presence or absence of these species, or other species that are known to exist regionally, but not documented in Elk Grove, cannot be confirmed.

Implementation of the Project does not, in and of itself, construct new housing in the City. However, the Project does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Project would result in changing the General Plan land use designations and/or zoning of up to 42 opportunity sites in the City. The Project would change allowed land uses on up to 353.5 acres in order to accommodate up to 8,843 high density residential units. The potential increase in development density and intensity on these 42 opportunity sites result in impacts on land that is assumed to be developed under the General Plan. The change from the existing designated use to a different designated use has negligible consequences on potential impacts to special status species, as described below.

The City requires any site with the potential for special status species to be surveyed and have a biological resource assessment performed prior to development. Any activities that would impact

special status species, or their habitat, would require project-specific mitigation to be developed to address the biological resources that are present, which may include compensatory mitigation and/or permitting in association with USFWS and/or CDFW. At this planning stage, a biological resource assessment has not been prepared for each of the 42 opportunity sites, nor have applications for development been filed with the City. In the absence of a development application showing the location/design of the development on each of the 42 opportunity sites, and the absence of a biological resource assessment, it is not possible to determine the actual impact on special status species.

The General Plan EIR presented policies and action items, as well as mitigation measures, that are intended to avoid, minimize, and/or mitigate impacts on biological resources to the extent possible as urban uses are constructed. The General Plan EIR specifically cited the following General Plan policies, action items, and mitigation measures:

GENERAL PLAN POLICIES AND ACTIONS

CAQ-7 *Consider development clustering where clustering would facilitate on-site protection of woodlands, grasslands, wetlands, stream corridors, scenic areas, or other appropriate natural features as open space, provided that:*

1. *Urban infrastructure capacity is available for urban use.*
2. *On-site resource protection is appropriate and consistent with other General Plan Policies.*
3. *The architecture and scale of development is appropriate for the area.*
4. *Development rights for the open space area are permanently dedicated and appropriate long-term management is provided for by either a public agency, private homeowners association, or other appropriate entity.*

This policy shall not apply in the Rural Residential area east of State Route 99, where clustering of development is not permitted.

CAQ-8 *Large trees (both native and non-native) are an important aesthetic (and, in some cases, biological) resource. Trees which function as an important part of the City's or a neighborhood's aesthetic character or as natural habitat should be retained to the extent possible during the development of new structures, roadways (public and private, including roadway widening), parks, drainage channels, and other uses and structures.*

If trees cannot be preserved onsite, offsite mitigation or payment of an in-lieu fee may be required by the City. Where possible, trees planted for mitigation should be located in the same watershed as the trees which were removed.

Trees which cannot be protected shall be replaced either on-site or off-site as required by the City.

CAQ-8-Action 1 *When reviewing native or non-native trees for preservation, considering the following criteria:*

- *Aesthetic value*
- *Biological value*

- *Health of the tree(s)*
- *Suitability for preservation in place*
- *Safety hazards posed by the tree(s)*

CAQ-8-Action 2 *Develop a list of trees which shall be considered generally exempt from preservation. These may include trees which pose a threat to public safety, to native trees, or to natural habitat.*

CAQ-8-Action 3 *Develop a list of trees which may be used when providing replacement trees for the loss of native and non-native trees.*

CAQ-8-Action 4 *Implement the City's Tree Preservation Ordinance.*

CAQ-8-Action 5 *Amend the City's Tree Preservation Ordinance to conform with the policies of this General Plan and to expand protection to non-native trees.*

CAQ-8-Action 6 *Develop a list of trees that should not be planted due to their invasive nature (that is, their ability to escape cultivation or to dominate natural areas) and provide this information to the public and the development community.*

CAQ-8-Action 7 *Retain the services of a qualified arborist(s) under contract to the City to provide information to decision-makers and staff on the suitability of trees for preservation.*

CAQ-8-Action 8 *Consider the use of revised standard roadway cross-sections which do not require the removal of trees in order to provide additional roadway capacity.*

CAQ-8-Action 9 *Provide funds for education, programs, and materials emphasizing the value and importance of trees. Support private foundations with local funds for their tree planting efforts.*

CAQ-9 *Wetlands, vernal pools, marshland and riparian (streamside) areas are considered to be important resources. Impacts to these resources shall be avoided unless shown to be technically infeasible. The City shall seek to ensure that no net loss of wetland areas occurs.*

CAQ-9-Action 1 *As part of the development review process, ensure that all potentially affected wetland areas are identified, and provide mitigation to ensure that no net loss occurs.*

CAQ-9-Action 2 *Coordinate with the California Department of Fish and Game and the U.S. Fish and Wildlife Service in the review of development projects.*

CAQ-10 *Consider the adoption of habitat conservation plans for rare, threatened, or endangered species.*

CAQ-10-Action 1 *As appropriate, work with the County of Sacramento and other agencies on a Habitat Conservation Plan or other mechanism to implement this policy.*

CAQ-11 *The City recognizes the value of streams to allow natural vegetation in and along streams, commensurate with flood control and public acceptance, to assist in removal of nutrients, pollutants, and silt.*

CAQ-12 *Encourage the retention of natural stream corridors, and the creation of natural stream channels where improvements to drainage capacity are required.*

CAQ-12-Action 1 *Re-vegetation using native plant species shall be encouraged; use of nonnative species shall be discouraged. Use of invasive species shall be prohibited.*

CAQ-12-Action 2 *The City shall permit stream channel realignment only:*

- *When necessary to eliminate flood hazards; or*
- *To protect and preserve natural features and vegetation which would*
- *otherwise be removed; or*
- *If the existing channel has been significantly disrupted by agricultural improvements or other man-made changes.*

CAQ-12-Action 5 *All storm drainage improvements on natural streams shall be designed where applicable to provide water flows necessary to protect and enhance fish habitats, native riparian vegetation, water quality, or ground water recharge.*

CAQ-12-Action 6 *Improvements in watercourses shall be designed for low maintenance, and to accommodate peak flows with vegetation (including mitigation plantings) in the channel. Channel modifications shall retain marsh and riparian vegetation whenever possible.*

CAQ-12-Action 7 *Where existing streams support riparian vegetation, evaluate options for constructing secondary flood control channels for flood control and water quality purposes.*

CAQ-12-Action 9 *Trails along stream corridors shall be located to minimize wildlife impacts and shall be restricted to non-motorized traffic.*

CAQ-12-Action 10 *Except where approved by the City as part of the development of a public or private development project, no grading, clearing, tree cutting, debris disposal or any other similar action shall be allowed in stream corridors except for normal channel maintenance.*

CAQ-13 *Fill may not be placed in any 100-year floodplain as delineated by currently effective FEMA Flood Insurance Rate Maps or subsequent comprehensive drainage plans unless specifically approved by the City.*

No fill shall be permitted in wetland areas unless approved by the City and appropriate state and federal agencies.

CAQ-14 *Development adjacent to a natural stream(s) shall provide a "stream buffer zone" along the stream.*

"Natural streams" shall be generally considered to consist of the following, subject to site-specific review by the City:

- *Deer Creek*
- *Elk Grove Creek*
- *Laguna Creek and its tributaries*

- *Morrison Creek*
- *Strawberry Creek*
- *White House Creek*

The following are examples of desired features for this transition zone; the specific design for each transition zone shall be approved on a case-by-case basis by the City.

Transition zones may include:

1. *A buffer zone of at least 50 (fifty) feet on each side of the stream, measured from the top of the stream bank.*
2. *Additional width to allow for a mowed fire break (where necessary), access for channel maintenance and flood control, and for planned passive recreation uses.*
3. *Sufficient width to provide for:*
    a. *Quality and quantity of existing and created habitat,*
    b. *Presence of species as well as species sensitivity to human disturbance,*
    c. *Areas for regeneration of vegetation,*
    d. *Vegetative filtration for water quality,*
    e. *Corridor for wildlife habitat linkage,*
    f. *Protection from runoff and other impacts of urban uses adjacent to the corridor,*
    g. *Trails and greenbelts.*
4. *The transition zone shall not include water quality treatment structures designed to meet pollutant discharge requirements.*

CAQ-15 *The use of bridges and other stream crossings with natural (unpaved) bottoms shall be encouraged to minimize impacts to natural habitat.*

CAQ-17 *Open space lands within a stream corridor shall be required to be retained as open space as a condition of development approval for projects that include a stream corridor. Unencumbered maintenance access to the stream shall be provided.*

GENERAL PLAN MITIGATION MEASURES

MM 4.10.1a *The City shall seek to preserve areas, where feasible, where special-status plant and animal species and critical habitat areas are known to be present or potentially occurring based on City biological resource mapping and data provided in the General Plan EIR or other technical material that may be adversely affected by public or private development projects. "Special-status" species are generally defined as species considered to be rare, threatened, endangered, or otherwise protected under local, state and/or federal policies, regulations or laws.*

MM 4.10.1b *The City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain special-status plant and animal species based on City biological resource mapping and data provided in the General Plan EIR or other technical material. The biological resources evaluation shall determine the presence/absence of these special-status plant and animal species on the site. The surveys associated with the evaluation shall be conducted during the appropriate seasons for proper*

identification of the species. Such evaluation will consider the potential for significant impact on special-status plant and animal species, and will identify feasible mitigation measures to mitigate such impacts to the satisfaction of the City and appropriate governmental agencies (e.g., U.S. Fish and Wildlife Service, California Department of Fish and Game and U.S. Army Corps of Engineers) where necessary (e.g., species listed under the State and/or Federal Endangered Species Act). Mitigation measures may include, but are not limited to, the following:

- *For special-status plant species: On- or off-site preservation of existing populations from direct and indirect impacts, seed and soil collection or plant transplant that ensures that the plant population is maintained.*
- *For special-status animal species: avoidance of the species and its habitat as well as the potential provision of habitat buffers, avoidance of the species during nesting or breeding seasons, replacement or restoration of habitat on- or off-site, relocation of the species to another suitable habitat area, payment of mitigation credit fees.*
- *Participation in a habitat conservation plan.*

The General Plan EIR concluded in the discussion provided under Impacts 4.10.1 and 4.10.2 that the development under the General Plan would have significant and unavoidable impacts on special-status species even with the implementation of General Plan policies, action items, and mitigation measures that are aimed at avoiding, minimizing, and/or mitigating such impacts. The General Plan mitigation measures were incorporated into the General Plan as policy and/or action items. The Project is consistent with the General Plan assumptions for location of future development in that each of the 42 opportunity sites is anticipated for development with residential or urban uses in the General Plan. The Project would not result in any new or more significant impacts than envisioned in the General Plan EIR. Future development under the Project, including the 42 opportunity sites, would be subject to relevant General Plan policies and action items, General Plan EIR Mitigation Measure 4.10.b, and relevant sections of the Municipal Code. The Project would not result in any new significant impacts or a significant increase in the severity of this impact beyond that which was disclosed in the General Plan EIR.

Impact 3.3-2: Potential to have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (less than significant)

Implementation of the Project does not, in and of itself, construct new housing in the City. However, the Project does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Project would result in changing the General Plan land use designations and/or zoning of up to 42 opportunity sites in the City. The Project would change allowed land uses on 353.5 acres in order to accommodate up to 8,843 high density residential units. The increase in development density and intensity on these 42 opportunity sites result in impacts on land that is assumed to be

developed with urban uses under the General Plan. The change from the existing urban use to a different urban use has negligible consequences on riparian habitat or other sensitive natural communities.

The City requires any site with sensitive habitat, including riparian habitat, to have a biological resources assessment performed prior to development. Any activities that would impact sensitive habitat would require mitigation, which may include compensatory mitigation and/or permitting in association with USACE and CDFW. At this planning stage a biological resources assessment has not been prepared for each of the 42 opportunity sites, nor have applications for development been filed with the City. In the absence of a development application showing the location/design of the development on each of the 42 opportunity sites, and the absence of a biological resources assessment, it is not possible to determine the actual impact on sensitive habitat.

The General Plan EIR presented policies and action items, as well as mitigation measures, that are intended to avoid, minimize, and/or mitigate impacts on biological resources, including sensitive habitat, to the extent possible as urban uses are constructed.

GENERAL PLAN POLICIES AND ACTIONS

The General Plan EIR specifically cited the following General Plan policies and action items: CAQ-7, CAQ-8, CAQ-8-Action 1, CAQ-8-Action 2, CAQ-8-Action 3, CAQ-8-Action 4, CAQ-8-Action 5, CAQ-8-Action 6, CAQ-8-Action 7, CAQ-8-Action 8, CAQ-8-Action 9, CAQ-9,CAQ-9-Action 1, CAQ-9-Action 2, CAQ-10, CAQ-10-Action 1, CAQ-11, CAQ-12, CAQ-12-Action 1, CAQ-12-Action 2, CAQ-12-Action 5, CAQ-12-Action 6, CAQ-12-Action 7, CAQ-12-Action 9, CAQ-12-Action 10, CAQ-13, CAQ-14, CAQ-15, and CAQ-17.

GENERAL PLAN MITIGATION MEASURES

MM 4.10.3 *The City shall require that impacts to riparian areas be mitigated to ensure that no net loss occurs, which may be accomplished by avoidance, revegetation and restoration onsite or creation of riparian habitat offsite.*

The General Plan EIR concluded that the urban development consistent with the General Plan would have potentially significant impacts on sensitive habitat, including riparian habitat, but that the impact would be reduced to a less than significant level with the implementation of General Plan policies, action items, and mitigation measures, and the City's standard procedures that are aimed at avoiding, minimizing, and/or mitigating such impacts. The General Plan EIR mitigation measures were incorporated into the General Plan as policy and action items. The Project is consistent with the General Plan assumptions for biological impacts associated with development on the 42 opportunity sites in that each of the 42 opportunity sites is anticipated for future residential or urban use. Development of the 42 sites would be subject to all the policies, action items, mitigation measures, and standards of the City. Implementation of the Project would have a ***less than significant*** impact with the implementation of policies, action items, and mitigation measures contained in the General Plan EIR.

Impact 3.3-3: Potential to have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (less than significant)

Streams, rivers, vernal pools, and marshes are of high concern because they provide unique aquatic habitat (perennial and ephemeral) for many endemic species, including special-status plants, birds, invertebrates, and amphibians. These aquatic habitats oftentimes qualify as protected wetlands or jurisdictional waters and are protected from disturbance through the state and federal CWA.

Implementation of the Project does not, in and of itself, construct new housing in the City. However, the Project does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Project would result in changing the General Plan land use designations and/or zoning of up to 42 opportunity sites in the City. The Project would change allowed land uses on 353.5 acres in order to accommodate up to 8,843 high density residential units. The increase in development density and intensity on these 42 opportunity sites result in impacts on land that is assumed to be developed with urban uses under the General Plan. The change from the existing urban use to a different urban use has negligible consequences on wetlands.

The City requires any site with a wetland/water feature to have a formal delineation performed and verified by the USACE prior to development. Any activities that would require removal, filling, or hydrologic interruption of a jurisdictional area would be subject to the federal Clean Water Act Section 404 and California Fish and Game Code Section 1601 (Streambed Alteration Agreement). At this planning stage a delineation has not been prepared for each of the 42 opportunity sites, nor have applications for development been filed with the City. In the absence of a development application showing the location/design of the development on each of the 42 opportunity sites, and the absence of a delineation, it is not possible to determine the actual impact on wetlands.

The General Plan EIR presented policies and action items, as well as mitigation measures, that are intended to avoid, minimize, and/or mitigate impacts on biological resources, including wetland/water features, to the extent possible as urban uses are constructed. The General Plan EIR specifically cited the following General Plan policies and action items: CAQ-7, CAQ-8, CAQ-8-Action 1, CAQ-8-Action 2, CAQ-8-Action 3, CAQ-8-Action 4, CAQ-8-Action 5, CAQ-8-Action 6, CAQ-8-Action 7, CAQ-8-Action 8, CAQ-8-Action 9, CAQ-9,CAQ-9-Action 1, CAQ-9-Action 2, CAQ-10, CAQ-10-Action 1, CAQ-11, CAQ-12, CAQ-12-Action 1, CAQ-12-Action 2, CAQ-12-Action 5, CAQ-12-Action 6, CAQ-12-Action 7, CAQ-12-Action 9, CAQ-12-Action 10, CAQ-13, CAQ-14, CAQ-15, and CAQ-17. The General Plan EIR also specifically presented the following mitigation measures: MM 4.10.3. The full text of these policies, action items, and mitigation measures are presented under Impacts 3.3-1 and 3.3-2 above.

The General Plan EIR concluded that the urban development consistent with the General Plan would have potentially significant impacts on wetlands, but that the impact would be reduced to a less than significant level with the implementation of General Plan policies, action items, and mitigation measures, and the City's standard procedures that are aimed at avoiding, minimizing, and/or mitigating such impacts. The Project is consistent with the General Plan assumptions for biological impacts associated with development on the 42 opportunity sites in that each of the 42 opportunity sites was anticipated for future residential or urban development. Development of the 42 opportunity sites would be subject to all the policies, action items, mitigation measures, and standards of the City. *Implementation of the Project* would have a ***less than significant*** impact as future projects would be required to be consistent with the General Plan, which requires implementation of the policies, action items, and mitigation measures (which were incorporated into the General Plan as policies and actions) contained in the General Plan EIR.

Impact 3.3-4: Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (no new impact and no increase in significance of impact)

Habitat loss, fragmentation, and degradation resulting from land use changes or habitat conversion can alter the use and viability of wildlife movement corridors (i.e. linear habitats that naturally connect and provide passage between two or more otherwise disjunct larger habitats or habitat fragments). Wildlife habitat corridors maintain connectivity for daily movement, travel, mate-seeking, and migration; plant propagation; genetic interchange; population movement in response to environmental change or natural disaster; and recolonization of habitats subject to local extirpation or removal. The suitability of a habitat as a wildlife movement corridor is related to, among other factors, the habitat corridor's dimensions (length and width), topography, vegetation, exposure to human influence, and the species in question.

Species utilize movement corridors in several ways. "Passage species" are those species that use corridors as thru-ways between outlying habitats. The habitat requirements for passage species are generally less than those for corridor dwellers. Passage species use corridors for brief durations, such as for seasonal migrations or movement within a home range. As such, movement corridors do not necessarily have to meet any of the habitat requirements necessary for a passage species everyday survival. "Corridor dwellers" are those species that have limited dispersal capabilities – a category that includes most plants, insects, reptiles, amphibians, small mammals, and birds – and use corridors for a greater length of time.

Movement corridors for wildlife through Elk Grove's urban core are limited due to the density of urbanization. Wildlife movement through Elk Grove's urban core is primarily limited to the creek and drainage systems. Outside of the urban core, wildlife movement is not limited due to the openness of the habitat. These areas provide habitat mostly for terrestrial, aquatic, and avian wildlife.

Implementation of the Project does not, in and of itself, construct new housing in the City. However, the Project does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Project would result in changing the General Plan land use designations and/or zoning of up to 42 opportunity sites in the City. The Project would change allowed land uses on 353.5 acres in order to accommodate up to 8,843 high density residential units. The increase in development density and intensity on these 42 opportunity sites result in impacts on land that is assumed to be developed with urban uses under the General Plan. The change from one urban use to a different urban use has negligible biological consequences.

The General Plan EIR presented policies and action items, as well as mitigation measures, that are intended to avoid, minimize, and/or mitigate impacts on biological resources, including movement or nursery habitat, to the extent possible as urban uses are constructed. The General Plan EIR specifically cited the following General Plan policies and action items: CAQ-7, CAQ-8, CAQ-8-Action 1, CAQ-8-Action 2, CAQ-8-Action 3, CAQ-8-Action 4, CAQ-8-Action 5, CAQ-8-Action 6, CAQ-8-Action 7, CAQ-8-Action 8, CAQ-8-Action 9, CAQ-9,CAQ-9-Action 1, CAQ-9-Action 2, CAQ-10, CAQ-10-Action 1, CAQ-11, CAQ-12, CAQ-12-Action 1, CAQ-12-Action 2, CAQ-12-Action 5, CAQ-12-Action 6, CAQ-12-Action 7, CAQ-12-Action 9, CAQ-12-Action 10, CAQ-13, CAQ-14, CAQ-15, and CAQ-17. The General Plan EIR also specifically presented the following mitigation measures: MM 4.10.1a, MM 4.10.1b, and 4.10.3. The full text of these policies, action items, and mitigation measures are presented under Impacts 3.3-1 and 3.3-2 above.

The General Plan EIR concluded that development of the City and Planning Area under the General Plan would have significant and unavoidable impacts on habitat even with the implementation of General Plan policies and action items, and General Plan EIR mitigation measures that are aimed at avoiding and minimizing such impacts. The Project is consistent with the General Plan assumptions for urban development in that each of the 42 opportunity sites is anticipated for a residential or urban use in the General Plan. Development of the 42 opportunity sites would be subject to all the General Plan policies and action items, including those that incorporate General Plan EIR mitigation measures, and the standards of the City. The Project would not result in any new significant impacts or a significant increase in the severity of this impact beyond that which was disclosed in the General Plan EIR.

Impact 3.3-5: The Project has the potential to conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (less than significant)

The General Plan Conservation and Air Quality Element contains an extensive list of policies and actions that apply to development projects within the City. The General Plan EIR contains mitigation measures that are applied to development consistent with the General Plan. In addition, the City has adopted a Tree Preservation and Protection Ordinance that strives to protect

and preserve trees of local importance. The Ordinance requires mitigation for the removal of trees of local importance.

Implementation of the Project does not, in and of itself, construct new housing in the City. However, the Project does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. These policies do not conflict with the City's General Plan policies or ordinances related to biological resources.

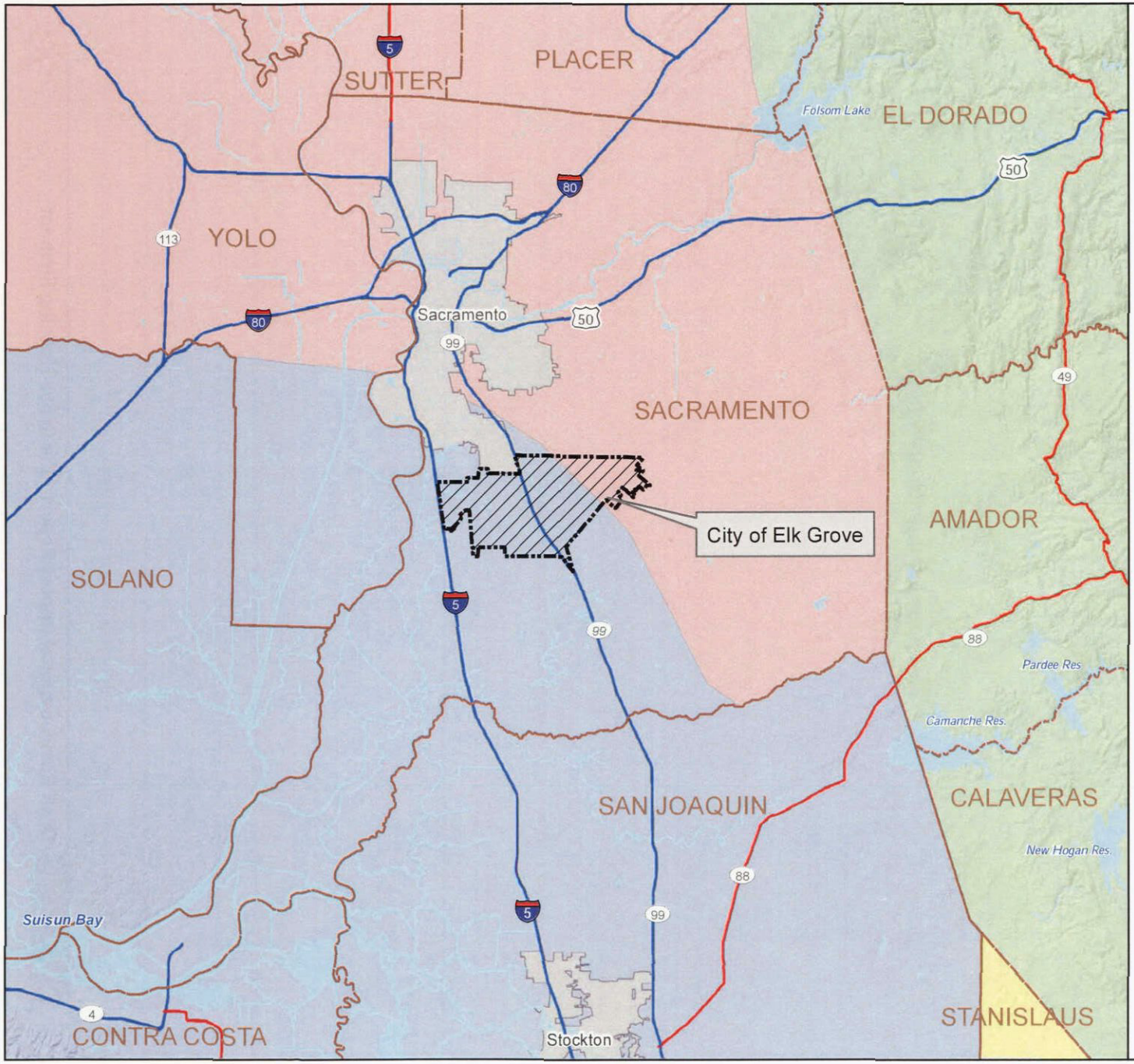
Implementation of the Project would result in changing the General Plan land use designations and/or zoning of up to 42 opportunity sites in the City on 353.5 acres in order to accommodate up to 8,843 high density residential units. The increase in development density and intensity on these 42 opportunity sites result in impacts on land that is assumed to be developed with urban uses under the General Plan. The change from one urban use to a different urban use has negligible biological consequences and does not conflict with existing policies or ordinance related to biological resources.

The General Plan EIR presented policies and action items, as well as mitigation measures, that are intended to avoid, minimize, and/or mitigate impacts on biological resources, including trees, to the extent possible as urban uses are constructed. The General Plan EIR specifically cited the following General Plan policies and action items: CAQ-7, CAQ-8, CAQ-8-Action 1, CAQ-8-Action 2, CAQ-8-Action 3, CAQ-8-Action 4, CAQ-8-Action 5, CAQ-8-Action 6, CAQ-8-Action 7, CAQ-8-Action 8, CAQ-8-Action 9, CAQ-9,CAQ-9-Action 1, CAQ-9-Action 2, CAQ-10, CAQ-10-Action 1, CAQ-11, CAQ-12, CAQ-12-Action 1, CAQ-12-Action 2, CAQ-12-Action 5, CAQ-12-Action 6, CAQ-12-Action 7, CAQ-12-Action 9, CAQ-12-Action 10, CAQ-13, CAQ-14, CAQ-15, and CAQ-17. The General Plan EIR also specifically presented the following mitigation measures: MM 4.10.1a and MM 4.10.1b. The full text of these policies, action items, and mitigation measures are presented under Impact 3.3-1 above. The Project does not conflict with any of these policies, action items, or mitigation measures. Development of the 42 opportunity sites would be subject to all the policies, action items, mitigation measures, and standards of the City. Therefore, there is no conflict and a **less than significant** impact would occur.

Impact 3.3-6: The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (no impact)

There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan that applies to Elk Grove at this time. Therefore, there is no conflict and **no impact** would occur.

This page left intentionally blank.



ELK GROVE HOUSING ELEMENT EIR

Figure 3.3-1: Bioregions Map

- BAY AREA/DELTA
- SACRAMENTO VALLEY
- SAN JOAQUIN VALLEY
- SIERRA
- CITY OF ELK GROVE

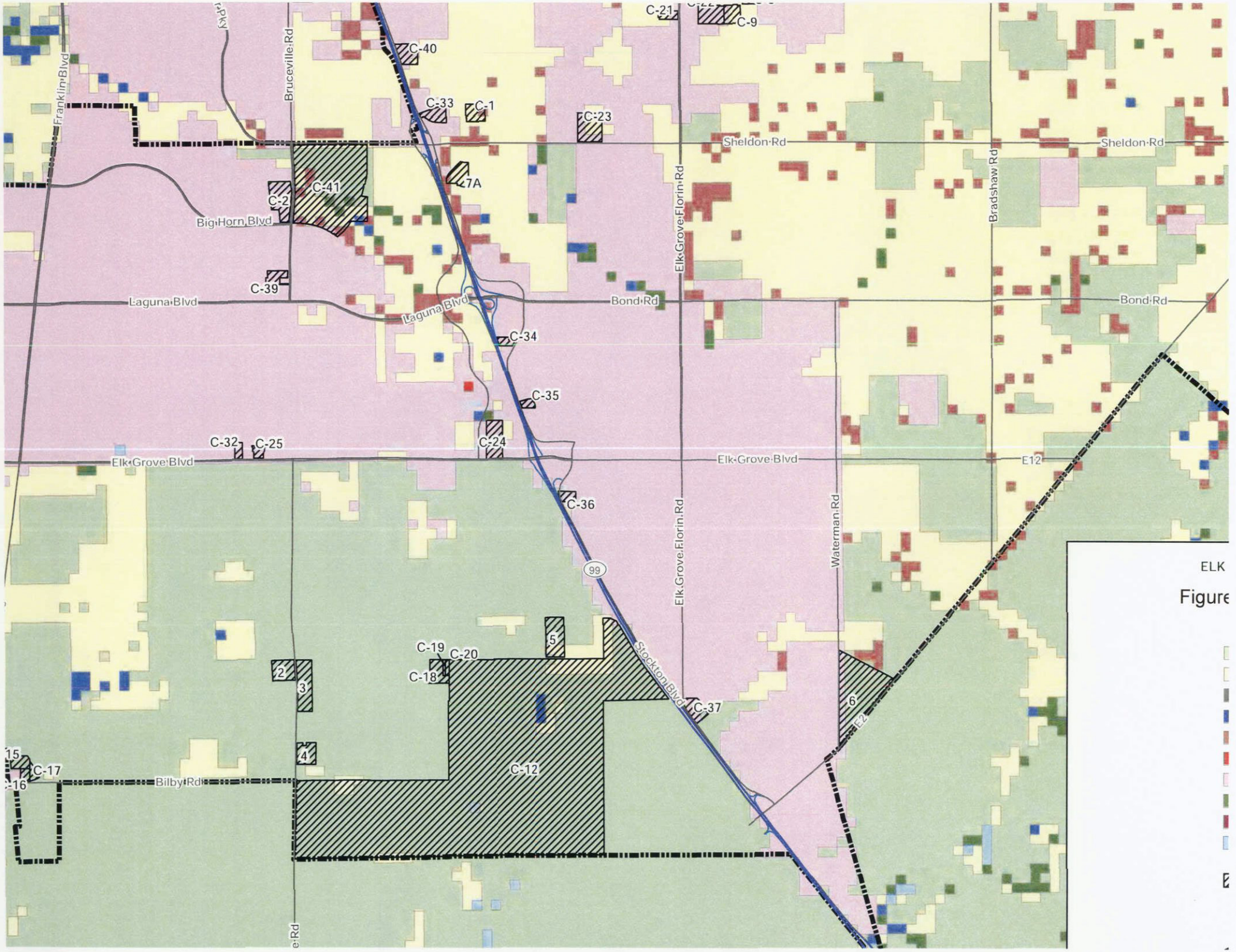
N
W E
S

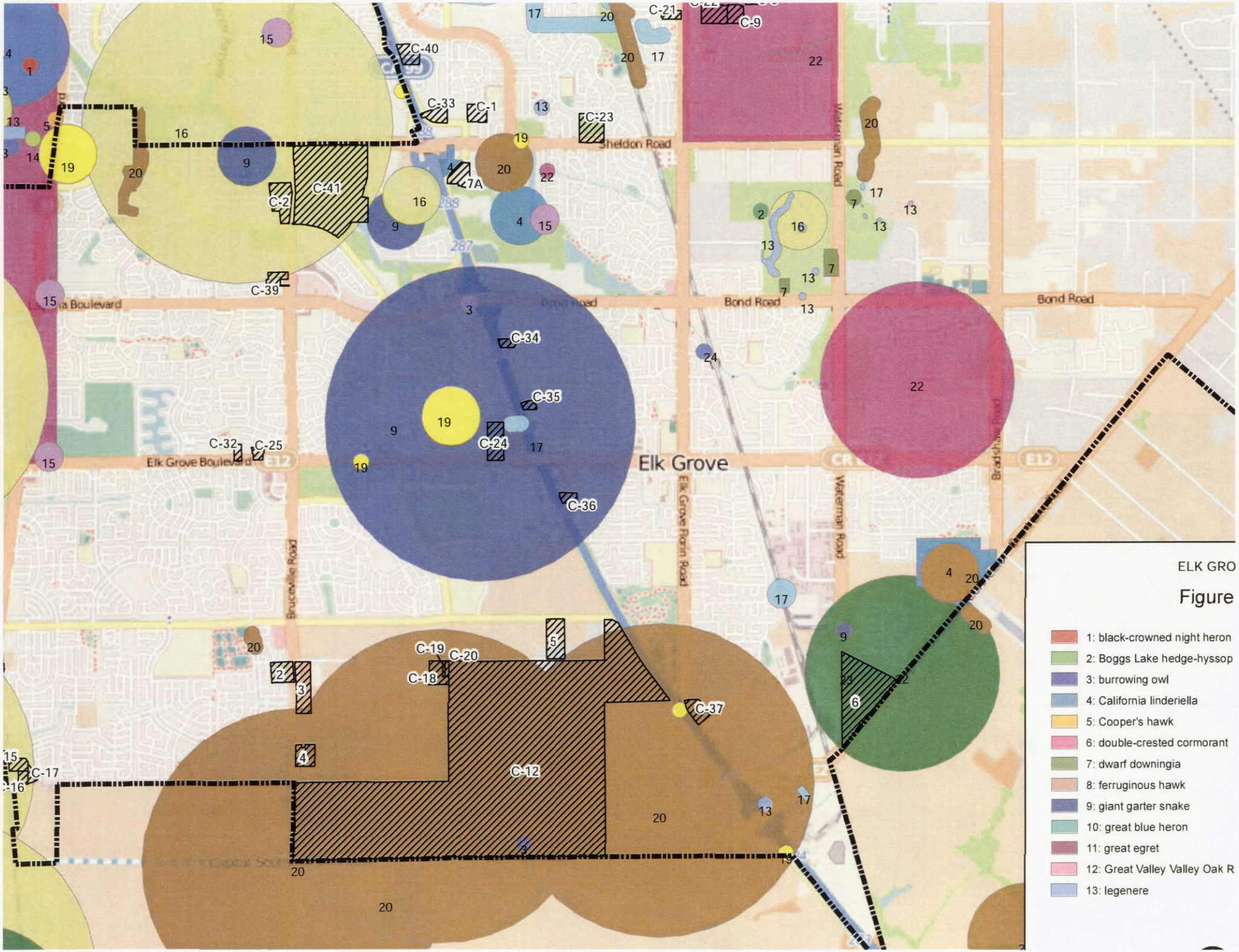
0 2.5 5 10 Miles

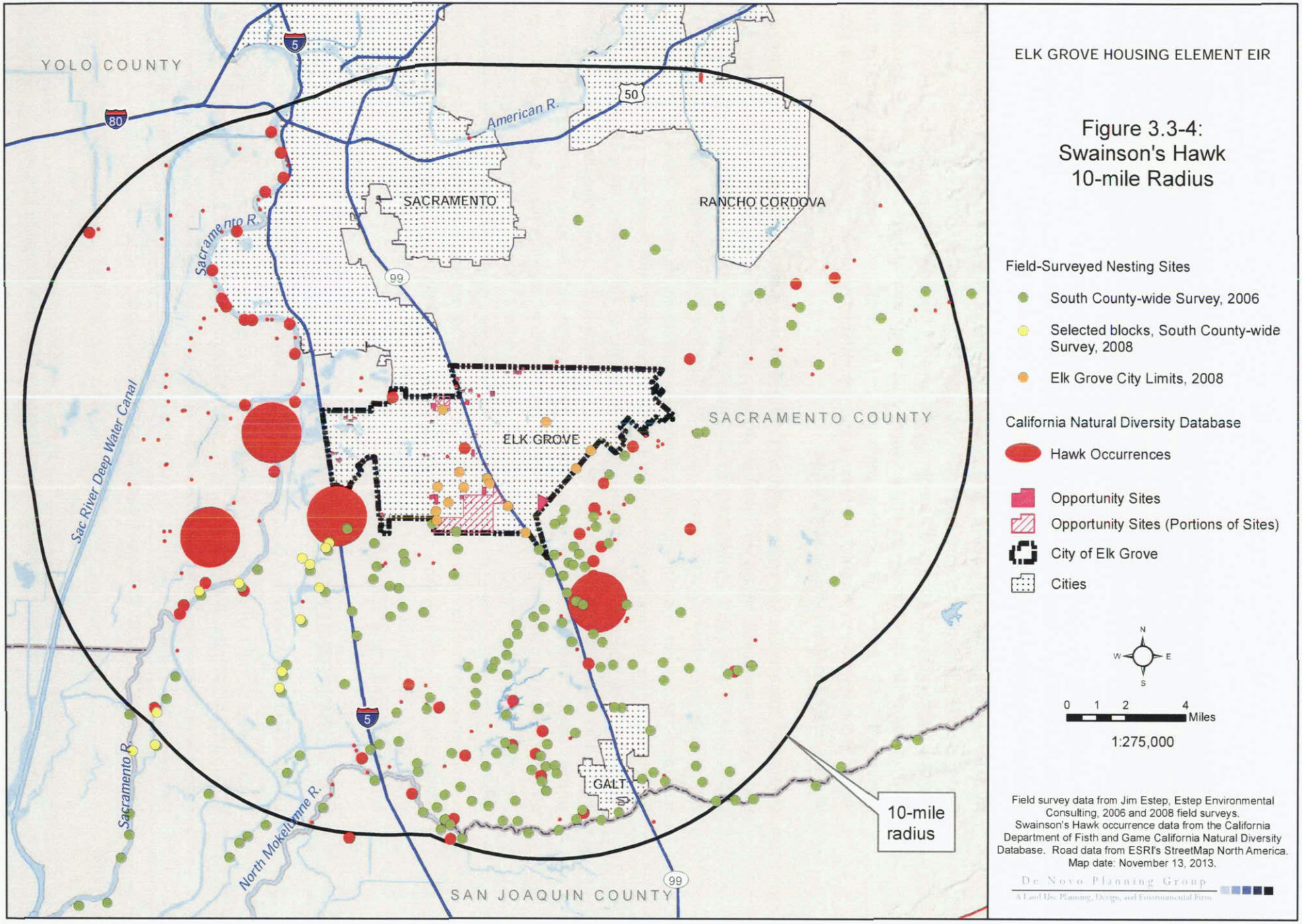
1:525,000

Bioregions GIS data from the California Department of Forestry and Fire Protection. Publication date 2004. Regions developed by the Inter-agency Natural Areas Coordinating Committee (INACC). The INACC regions have been adopted for use as bioregion boundaries by the California Biodiversity Council (CBC).
Map date: October 16, 2013.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm


Franklin Blvd
Bruceville Rd
C-40
C-33
C-1
C-21
C-9
C-23
Sheldon Rd
Sheldon Rd
7A
C-41
C-2
Big Horn Blvd
Elk Grove Florin Rd
Bradshaw Rd
C-39
Laguna Blvd
Laguna Blvd
Bond Rd
Bond Rd
C-34
C-35
C-32
C-25
C-24
Elk Grove Blvd
Elk Grove Blvd
E12
C-36
99
Elk Grove Florin Rd
Waterman Rd
ELK
Figure
C-19
C-20
C-18
5
2
3
Stockton Blvd
C-37
6
E2
4
C-12
C-17
Bilby Rd


ELK GRO
Figure
1: black-crowned night heron
2: Boggs Lake hedge-hyssop
3: burrowing owl
4: California linderiella
5: Cooper's hawk
6: double-crested cormorant
7: dwarf downingia
8: ferruginous hawk
9: giant garter snake
10: great blue heron
11: great egret
12: Great Valley Valley Oak R
13: legenere
Elk Grove
Elk Grove Boulevard
Bond Road
Sheldon Road
Waterman Road
Bruceville Road
Elk Grove Florin Road
C-1
C-2
C-9
C-12
C-17
C-18
C-19
C-20
C-21
C-23
C-24
C-25
C-32
C-33
C-34
C-35
C-36
C-37
C-39
C-40
C-41


YOLO COUNTY
SACRAMENTO
RANCHO CORDOVA
American R.
Sacramento R.
Sac River Deep Water Canal
ELK GROVE
SACRAMENTO COUNTY
GALT
Sacramento R.
North Mokelumne R.
SAN JOAQUIN COUNTY
10-mile radius
5
80
50
99
ELK GROVE HOUSING ELEMENT EIR
Figure 3.3-4:
Swainson's Hawk
10-mile Radius
Field-Surveyed Nesting Sites
South County-wide Survey, 2006
Selected blocks, South County-wide Survey, 2008
Elk Grove City Limits, 2008
California Natural Diversity Database
Hawk Occurrences
Opportunity Sites
Opportunity Sites (Portions of Sites)
City of Elk Grove
Cities
N
W
E
S
0 1 2 4
Miles
1:275,000
Field survey data from Jim Estep, Estep Environmental Consulting, 2006 and 2008 field surveys.
Swainson's Hawk occurrence data from the California Department of Fisth and Game California Natural Diversity Database. Road data from ESRI's StreetMap North America.
Map date: November 13, 2013.
De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This section discusses regional greenhouse gas (GHG) emissions and climate change impacts that could result from implementation of the Project. This section provides a background discussion of greenhouse gases and climate change linkages and effects of global climate change. This section is organized with an existing setting, regulatory setting, approach/methodology, and impact analysis.

The analysis and discussion of the GHG and climate change impacts in this section focuses on the Project's consistency with local, regional, and statewide climate change planning efforts and discusses the context of these planning efforts as they relate to the Project.

As described in greater detail below, emissions of greenhouse gases (GHGs) have the potential to adversely affect the environment in a cumulative context. The emissions from a single project will not cause global climate change, however, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. Therefore, the analysis of GHGs and climate change presented in this section is presented in terms of the Project's contribution to cumulative impacts and potential to result in cumulatively considerable impacts related to GHGs and climate change.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a Project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the *combined* effects from *both* the Project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the Project's *incremental* effects are cumulatively considerable" and thus significant in and of themselves. The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the *cumulative impacts* of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

3.4.1 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGE LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

3.4 GREENHOUSE GASES AND CLIMATE CHANGE

Naturally occurring greenhouse gases include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2005, concentrations of these three greenhouse gases have increased globally by 36, 148, and 18 percent, respectively (IPCC 2007)[1].

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, commercial, and agricultural sectors (California Air Resources Board, 2012)[2]. In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (California Air Resources Board, 2012).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced 492 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2004 (California Energy Commission 2006a) [3]. By 2020, California is projected to produce 507 $MMTCO_2e$ per year.[4]

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the

---

1 Intergovernmental Panel on Climate Change. 2007. "Climate Change 2007: The Physical Science Basis, Summary for Policymakers."
http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg1_report_the_physical_science_basis.htm

[2] California Air Resources Board. 2012. "Greenhouse Gas Inventory Data, 2000-2009.
http://www.arb.ca.gov/cc/inventory/data/data.htm

3 California Energy Commission. 2006a. Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004. http://www.arb.ca.gov/cc/inventory/archive/archive.htm

4 California Air Resources Board. 2010. "Functional Equivalent Document prepared for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms."

greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2008, accounting for 36.9% of total GHG emissions in the state (California Air Resources Board, 2012). This category was followed by the electric power sector (including both in-state and out of-state sources) (24.8%) and the industrial sector (21.1%) (California Air Resources Board, 2012).

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state. The snowpack portion of the supply could potentially decline by 70% to 90% by the end of the 21st century (Cal EPA 2006)[5]. This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the state; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels (Cal EPA 2006). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands (Cal EPA 2006). As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. Under the emissions scenarios of the Climate Scenarios report (Cal EPA 2006), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

PUBLIC HEALTH

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase from 25% to 35% under the lower warming range and to 75%

5 California Environmental Protection Agency, Climate Action Team. 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature.
http://www.climatechange.ca.gov/climate_action_team/reports/

to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

WATER RESOURCES

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The state's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major state fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25% of the water supply they need; decrease the potential for hydropower production within the state (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70% to 90%. Under the lower warming scenario, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snow pack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

AGRICULTURE

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon

dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

FORESTS AND LANDSCAPES

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large of wildfires. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30% toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90%.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the state. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60% to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests is also expected to decrease as a result of global warming.

RISING SEA LEVELS

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the state's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

ENERGY CONSUMPTION

The consumption of nonrenewable energy (primarily gasoline and diesel fuel) associated with the operation of passenger, public transit, and commercial vehicles results in GHG emissions that ultimately result in global climate change. Alternative fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

Electricity Consumption

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Approximately 71 percent of the electrical power needed to meet California's demand is produced in the state. Approximately 29 percent of its electricity demand is imported from the Pacific Northwest and the Southwest (California Energy Commission, 2012)[6]. In 2010, California's in-state generated electricity was derived from natural gas (53.4 percent), large hydroelectric resources (14.6 percent), coal (1.7 percent), nuclear sources (15.7 percent), and renewable resources that include geothermal, biomass, small hydroelectric resources, wind, and solar (14.6 percent) (California Energy Commission, 2012).

According to the California Energy Commission (CEC), total statewide electricity consumption increased from 166,979 gigawatt-hours (GWh) in 1980 to 228,038 GWh in 1990, which is an estimated annual growth rate of 3.66 percent. The statewide electricity consumption in 1997 was 246,225 GWh, reflecting an annual growth rate of 1.14 percent between 1990 and 1997 (California Energy Commission Energy Almanac, 2012). Statewide consumption was 274,985 GWh in 2010, an annual growth rate of 0.9 percent between 1997 and 2010. The Sacramento Area Council of Governments (SACOG) region consumed 18,398 GWh in 2010 (SACOG MTP/SCS 2035 Draft EIR, 2011), roughly 6.7 percent of the state total. The SACOG region includes the counties of El Dorado, Placer, Sacramento, Sutter, Yolo and Yuba as well as the 22 cities within these six counties.

Oil

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2009, world consumption of oil had reached 96 million barrels per day. The United States, with approximately five percent of the world's population, accounts for approximately 19 percent of world oil consumption, or approximately 18.6 million barrels per day (The World Factbook 2009, Washington, DC: Central Intelligence Agency, 2009). The transportation sector relies heavily on oil. In California, petroleum based fuels currently provide approximately 96 percent of the state's transportation energy needs (California Energy Commission, 2012).

6 California Energy Commission (2012). Energy Almanac. Retrieved August 2012, from http://energyalmanac.ca.gov/overview/index.html

Natural Gas

In 2010, the SACOG region consumed 529.5 million therms of natural gas. Natural gas supplies are derived from underground sources and brought to the surface at gas wells. Once it is extracted, gas is purified and the odorant that allows gas leaks to be detected is added to the normally odorless gas. Natural gas suppliers, such as PG&E, then send the gas into transmission pipelines, which are usually buried underground. Compressors propel the gas through the pipeline system, which delivers it to homes and businesses.

The state produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest (California Energy Commission, 2012). In 2006, California produced 325.6 billion cubic feet of natural gas (California Energy Commission, 2012). PG&E is the largest publicly-owned utility in California and provides natural gas for residential, industrial, and agency consumers within the SACOG area, including the City.

3.4.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National ambient air quality standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

Federal Climate Change Policy

According to the EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The federal government's goal is to reduce the greenhouse gas (GHG) intensity (a measurement of GHG emissions per unit of economic activity) of the American economy by 18 percent over the 10-year period from 2002 to 2012. In addition, the EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR", "Climate Leaders", and Methane Voluntary Programs. However, as of this writing, there are no adopted federal plans, policies, regulations, or laws directly regulating GHG emissions.

STATE

Assembly Bill 1493

In response to AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards. Amendments to CCR Title 13 Sections 1900 (13 CCR 1900) and 1961 (13 CCR 1961), and adoption of Section 1961.1 (13 CCR 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. For passenger cars and light-duty trucks 3,750 pounds or less loaded vehicle weight (LVW), the 2016 GHG emission limits are approximately 37 percent lower than during the first year of the regulations in 2009. For medium-duty passenger vehicles and light-duty trucks 3,751 LVW to 8,500 pounds gross vehicle weight (GVW), GHG emissions are reduced approximately 24 percent between 2009 and 2016.

CARB requested a waiver of federal preemption of California's Greenhouse Gas Emissions Standards. The intent of the waiver is to allow California to enact emissions standards to reduce carbon dioxide and other greenhouse gas emissions from automobiles in accordance with the regulation amendments to the CCRs that fulfill the requirements of AB 1493. The EPA granted a waiver to California to implement its greenhouse gas emissions standards for cars.

Assembly Bill 1007

Assembly Bill 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of alternative fuels in California. As a result, the CEC prepared the State Alternative Fuels Plan in consultation with the state, federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

California Executive Orders S-3-05 and S-20-06, and Assembly Bill 32

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050.

In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

Assembly Bill 32- Climate Change Scoping Plan

On December 11, 2008 ARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of ARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce CO_2e emissions by 169 million metric tons (MMT), or approximately 30 percent, from the state's projected 2020 emissions level of 596 MMT of CO_2e under a business-as-usual scenario. (This is a reduction of 42 MMT CO_2e, or almost 10 percent, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions ARB recommends for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e),
- the Low-Carbon Fuel Standard (15.0 MMT CO_2e),
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e), and
- a renewable portfolio standard for electricity production (21.3 MMT CO_2e).

California Strategy to Reduce Petroleum Dependence (AB 2076)

In response to the requirements of AB 2076 (Chapter 936, Statutes of 2000), the CEC and the CARB developed a strategy to reduce petroleum dependence in California. The strategy, *Reducing California's Petroleum Dependence*, was adopted by the CEC and CARB in 2003. The strategy recommends that California reduce on-road gasoline and diesel fuel demand to 15 percent below 2003 demand levels by 2020 and maintain that level for the foreseeable future; the Governor and Legislature work to establish national fuel economy standards that double the fuel efficiency of new cars, light trucks, and sport utility vehicles (SUVs); and increase the use of non- petroleum fuels to 20 percent of on-road fuel consumption by 2020 and 30 percent by 2030.

Governor's Low Carbon Fuel Standard (Executive Order #S-01-07)

Executive Order #S-01-07 establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through establishment of a Low Carbon Fuel Standard. The Low Carbon Fuel Standard is incorporated into the State Alternative Fuels Plan and is one of the proposed discrete early action GHG reduction measures identified by CARB pursuant to AB 32.

Senate Bill 97 (SB 97)

Senate Bill 97 (Chapter 185, 2007) required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the State CEQA Guidelines for addressing greenhouse gas emissions. OPR prepared its recommended amendments to the State CEQA Guidelines to

provide guidance to public agencies regarding the analysis and mitigation of greenhouse gas emissions and the effects of greenhouse gas emissions in draft CEQA documents. The Amendments became effective on March 18, 2010.

Senate Bill 375

Sen. Bill No. 375 (Stats. 2008, ch. 728) (SB 375) was built on AB 32 (California's 2006 climate change law). SB 375's core provision is a requirement for regional transportation agencies to develop a Sustainable Communities Strategy (SCS) in order to reduce GHG emissions from passenger vehicles. The SCS is one component of the existing Regional Transportation Plan (RTP).

The SCS outlines the region's plan for combining transportation resources, such as roads and mass transit, with a realistic land use pattern, in order to meet a state target for reducing GHG emissions. The strategy must take into account the region's housing needs, transportation demands, and protection of resource and farmlands.

Additionally, SB 375 modified the state's Housing Element Law to achieve consistency between the land use pattern outlined in the SCS and the Regional Housing Needs Assessment allocation. The legislation also substantially improved cities' and counties' accountability for carrying out their housing element plans.

Finally, SB 375 amended the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) to ease the environmental review of developments that help reduce the growth of GHG emissions.

The SACOG Board, which is the local metropolitan planning organization that covers the six-county area in the Sacramento region, including the City, adopted the MTP/SCS in April 2012. A program-level EIR addressing the environmental impacts of the MTP/SCS was also prepared and certified.

LOCAL

Elk Grove Climate Action Plan

On March 27, 2013, the City Council adopted the Elk Grove Climate Action Plan, or CAP. The City's Climate Action Plan is a culmination of existing and proposed initiatives to reduce greenhouse gas emissions. The CAP ensures that the City's future activities and development patterns conform to California climate change legislation. The CAP will also make future development easier by acting as a tiering document for GHG emissions under the California Environmental Quality Act.

The purpose of the CAP is to identify how the City will achieve the state-recommended GHG emission reduction target of 15 percent below 2005 levels by the year 2020 and to create a path to obtain 2050 State targets associated with Governor's Order S-03-05. The CAP provides goals and associated measures, also referred to as GHG reduction measures, in the sectors of energy use, transportation, land use, water, and solid waste. In addition, the CAP provides goals and measures for longer-term adaptation to the potential risks associated with climate change.

More specifically, the CAP:

- Identifies sources of greenhouse gas emissions from sources within the City's jurisdictional/political boundary and estimates how these emissions may change over time.

- Discusses the various outcomes of reduction efforts and how these reduction efforts can be implemented and advertised.

- Provides energy use, transportation, land use, water use, and solid waste strategies to reduce Elk Grove's greenhouse gas emissions levels to 15 percent below 2005 levels by 2020.

- Provides methods for reducing the City's greenhouse gas emissions consistent with the direction of the State of California through the Global Warming Solutions Act (AB 32), Governor's Order S-03-05, Public Resources Code Section 21083.3(b),(d), and CEQA Guidelines Section 15064.4. [The California Environmental Quality Act (CEQA) Guidelines encourage the adoption of policies or programs as a means of addressing comprehensively the cumulative impacts of projects. See State CEQA Guidelines, §15064(h)(3), §15130(d).]

- Provides substantial evidence that the emissions reductions estimated in the Climate Action Plan are feasible.

Elk Grove General Plan Sustainability Element

Concurrent with adoption of the CAP the City Council also adopted a new component to the General Plan – a Sustainability Element. The Sustainability Element incorporates new social, environmental, and economic goals and ideas into the General Plan that focus on the concept of sustainability.

The Sustainability Element provides an adopted vision and strategy to guide sustainability in the City over the next 20 years. The CAP is a tool that is linked to the General Plan through the Sustainability Element, but focuses specifically on greenhouse gas emissions reductions.

The Sustainability Element and CAP are part of the framework for developing a greenhouse gas emissions reduction strategy in compliance with Section 15183.5(b) of the California Environmental Quality Act (CEQA) Guidelines. Section 15183.5(b) refers to the development of a plan that can be used to streamline future development proposed as a part of the programmatic policy structure in place at the City.

The Sustainability Element is an optional element of the General Plan, and is not mandated by the State. The City worked closely with the community to define sustainability and identify the policy topics contained within the Sustainability Element.

The Sustainability Element includes the following components:

- A definition of sustainability, as defined by the community through public workshops;

- A description of relevant State laws;
- Identification and description of sustainability policy areas addressed in the General Plan;
- An explanation of the relationship of the Sustainability Element to other elements in the General Plan, including a matrix identifying the element in which policies relating to each sustainability policy area can be found;
- An explanation of the relationship of the Sustainability Element to the CAP; and
- A set of focused sustainability policies and actions not addressed in other elements of the General Plan.

The Sustainability Element identified three primary components of sustainability:

- **Environment** - Environmental sustainability is achieved by being a steward of the natural environment and reducing the impact of human activities on natural resources and systems that support the community.
- **Economy** - A sustainable economy is one that is strong, resilient, and conscientious. It is achieved by supporting education, jobs, businesses, green industries, innovation and economic development.
- **Community** - A sustainable community is one that is accessible, healthy, safe, and diverse and promotes well-being. It is achieved by supporting public participation, healthy living, access to social services, cultural diversity, historic preservation and the arts.

The following policies and actions in the Sustainability Element are relevant to the Project:

Policy S-9: Support innovation and green building best management practices for all new private development.

> **S-9-Action 1:** Require all new private developments to meet and (as determined feasible by the City) exceed state Title 24 Energy Efficiency Building Standards. (Please see CAP reduction measures.)
>
> **S-9-Action 3:** Establish a green building incentive program to encourage developers to integrate green design techniques above and beyond the requirements of Action 1. Incentives may include, but are not limited to, expedited review, plan/permit review fee reduction, density bonuses, tax credits, and/or technical assistance.

Policy S-10: Support higher-density, compact, residential development along transit by placing high-density residential or mixed-use sites near transit opportunities. (Please see CAP reduction measures.)

Policy S-11: Support strategies that reduce reliance on single-occupancy private vehicles and promote the viability of alternative modes of transport. (Please see CAP reduction measures.)

S-11-Action 4: Ensure new multi-family and commercial developments provide bicycle parking and other bicycle support facilities appropriate for the users of the development.

S-11-Action 5: Work with private entities to implement a citywide car-sharing program.

Policy S-12: Improve the health and sustainability of the community through improved regional air quality and reduced greenhouse gas emissions that contribute to climate change.

S-12-Action 1: Ensure that new development is consistent with the City's Climate Action Plan.

Elk Grove Sustainability Element and Climate Action Plan Subsequent Environmental Impact Report

On March 27, 2013, the Elk Grove City Council certified the Sustainability Element and Climate Action Plan Subsequent Environmental Impact Report (SEIR) (SCH#2011062031). The SEIR discloses environmental effects associated with implementation of the Elk Grove Sustainability Element and CAP. When considering approval of subsequent development projects, the City utilizes the SEIR as the basis in determining potential environmental effects and the appropriate level of environmental review, if any, of a subsequent activity. Additional environmental review under CEQA may be required for subsequent projects and would be generally based on the subsequent project's consistency with the Project and the analysis in this EIR, as required under CEQA. It may be determined that some future projects or activities under the Project may be exempt from environmental review. When subsequent projects or activities under the Project are proposed, the City will examine the projects or activities to determine whether their effects were adequately analyzed in this Program EIR (CEQA Guidelines Section 15168). If the projects or activities would have no effects beyond those disclosed in this EIR, no further CEQA compliance would be required.

SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy

The Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) is a long-range plan for transportation in the region built on the Blueprint. SACOG is required by federal law to update the MTP at least every four years. Since the last MTP, California adopted Senate Bill 375, which requires a Sustainable Communities Strategy, similar to the Sacramento region's smart land use Blueprint project, to be added to transportation plans across the state. The Blueprint is a long-range vision for growth that promotes compact, mixed-use development and more transportation choices as an alternative to low-density development.

3.4.3 IMPACTS AND MITIGATION MEASURES

GHG THRESHOLDS OF SIGNIFICANCE AND METHODOLOGY

Analysis Approach

The California Office of Planning and Research (OPR) recommends that lead agencies under CEQA make a good-faith effort, based on available information, to estimate the quantity of GHG emissions that would be generated by a Project, including the emissions associated with construction activities, stationary sources, vehicular traffic, and energy consumption: to determine whether the impacts have the potential to result in a significant project or cumulative environmental impact; and, where feasible mitigation is available, to mitigate any project or cumulative impact determined to be potentially significant. More recently, OPR prepared amendments to the State CEQA Guidelines, pursuant to SB 97 (Statutes of 2007) for adoption by the California Natural Resources Agency. The amendments added several provisions reinforcing the requirements to assess a project's GHG emissions as a contribution to the cumulative impact of climate change. The amendments went into effect on March 18, 2010.

Specifically, CEQA Guidelines Section 15064.4, as amended March 18, 2010, state:

(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

> *(1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or*
>
> *(2) Rely on a qualitative analysis or performance based standards.*

(b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

> *(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;*
>
> *(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*
>
> *(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's*

incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The analysis of greenhouse gases in this EIR is conducted at both the quantitative and qualitative level. The analysis below includes a quantification of the estimated GHG levels that would be generated upon full buildout of the proposed Housing Element. The qualitative analysis addresses the project's consistency with the Elk Grove Climate Action Plan, which is the City's primary tool for regulating and reducing GHG emissions throughout the community. This analysis approach is consistent with the guidance provided under CEQA Guidelines Section 15064.4(a)(2).

THRESHOLDS OF SIGNIFICANCE

Pursuant to Appendix G of the CEQA Guidelines, climate change-related impacts are considered significant if implementation of the proposed Project would do any of the following:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

In order to determine whether or not the proposed Project would generate GHG emissions that may have a significant impact on the environment, this EIR relies on the Project's compliance with the City's adopted Climate Action Plan. The Elk Grove Climate Action Plan includes a range of measures, that when fully implemented, would result in a 15% reduction of GHG emissions Citywide by 2020, compared to the 2005 baseline GHG emissions. The City certified a Subsequent EIR (SCH# 2011062031) on March 27, 2013 that addressed the potential environmental impacts of implementation of the CAP, and included provisions for the subsequent review of development projects found to be consistent with the CAP. The SEIR and CAP include detailed quantifications and supporting documentation and analysis that demonstrate the feasibility of reaching the GHG reduction targets established in the CAP.

As described on page 1.0-3 of the SEIR, additional environmental review under CEQA may be required for subsequent projects and would be generally based on the subsequent project's consistency with the CAP and the analysis in the SEIR, as required under CEQA. It may be determined that some future projects or activities under the Project may be exempt from environmental review. When subsequent projects or activities are proposed, the City will examine the projects or activities to determine whether their effects were adequately analyzed in this Program EIR (CEQA Guidelines Section 15168). If the projects or activities would have no effects beyond those disclosed in this EIR, no further CEQA compliance would be required.

In order to determine whether or not the Project would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, the Project is analyzed for consistency with the City's CAP, which is implemented through the City's General Plan

Sustainability Element. The Elk Grove CAP was developed by the City in order for future development projects and City actions to be consistent with – or better than - the statewide GHG reductions goals outlined in AB 32.

Methodology

Greenhouse gases attributable to the Project would be generated from two primary sources: 1) energy usage from future housing development that may occur following adoption of the Housing Element, and 2) emissions from vehicle trips and vehicle miles travelled generated by future housing development that may occur following adoption of the Housing Element.

The analysis, conclusions, and findings contained in the Elk Grove Sustainability and Climate Action Plan Subsequent EIR (SCH# 2011062031) are incorporated into this EIR by reference. As described under CEQA Guidelines Section 15183.5(a), *lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review. Project-specific environmental documents may rely on an EIR containing a programmatic analysis of greenhouse gas emissions as provided in Section 15152 (tiering), 15167 (staged EIRs), 15168 (program EIRs), 15175-15179.5 (Master EIRs), 15182 (EIRs prepared for Specific Plans), and 15183 (EIRs Prepared for General Plans, Community Plans, or Zoning).*

As described under CEQA Guidelines Section 15183.5(b)(2), *Use with Later Activities: A plan for the reduction of greenhouse gas emissions, once adopted following certification of an EIR or adoption of an environmental document, may be used in the cumulative impacts analysis of later projects. An environmental document that relies on a greenhouse gas reduction plan for a cumulative impact analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project.*

GHG IMPACTS AND MITIGATION MEASURES

Impact 3.4-1: The Project may generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. (cumulatively considerable and significant and unavoidable)

The City's CAP is a culmination of existing and proposed initiatives to reduce greenhouse gas emissions. The CAP ensures that the City's future activities and development patterns conform to California climate change legislation. The CAP will also make future development easier by acting as a tiering document for GHG emissions under the California Environmental Quality Act.

The purpose of the CAP is to identify how the City will achieve the state-recommended GHG emission reduction target of 15 percent by the year 2020 and to create a path to obtain 2050 State

targets associated with Governor's Order S-03-05. The CAP provides goals and associated measures, also referred to as GHG reduction measures, in the sectors of energy use, transportation, land use, water, and solid waste. In addition, the CAP provides goals and measures for longer-term adaptation to the potential risks associated with climate change.

More specifically, the CAP:

- Identifies sources of greenhouse gas emissions from sources within the City's jurisdictional/political boundary and estimates how these emissions may change over time.

- Discusses the various outcomes of reduction efforts and how these reduction efforts can be implemented and advertised.

- Provides energy use, transportation, land use, water use, and solid waste strategies to reduce Elk Grove's greenhouse gas emissions levels to 15 percent below 2005 levels by 2020.

- Provides methods for reducing the City's greenhouse gas emissions consistent with the direction of the State of California through the Global Warming Solutions Act (AB 32), Governor's Order S-03-05, Public Resources Code Section 21083.3(b,d), and CEQA Guidelines Section 15064.4. [The CEQA Guidelines encourage the adoption of policies or programs as a means of addressing comprehensively the cumulative impacts of projects. See State CEQA Guidelines, §15064(h)(3), §15130(d).]

- Provides substantial evidence that the emissions reductions estimated in the Climate Action Plan are feasible.

The CAP is structured to serve as a programmatic tiering document for the purposes of CEQA. A tiering document front-loads the analysis needed for many projects in order to decrease the time and money that would be needed for individual analyses for each project.

The measures presented in the CAP have the potential to reduce GHG emissions by 175,832 metric tons (MT) of CO2e by 2020. These reductions are equivalent to a 15 percent reduction from 2005 baseline levels.

The CAP's achievement of the 15 percent reduction target is based on growth assumptions in the City's General Plan and regional growth forecasts. For eligibility to streamline from the CAP for purposes of an environmental analysis, projects must demonstrate consistency with CAP forecast assumptions.

The Project would require changes to the City's General Plan Land Use Map and Zoning Map. Implementation of the Project would increase the development intensity and development potential on up to 42 sites within the City, as shown on Table 2.0-1. The Housing Element does not approve or entitle development nor does it require development. The Housing Element presents the City's plan to accommodate housing, as required by state law.

The Project would accommodate up to 8,843 multifamily housing units, which represents a population of approximately 28,453. Comparing to existing General Plan land use designations for the 42 sites, implementation of the Project would result in an increase of 4,875 housing units and 15,680 persons when compared to the adopted General Plan.

The projected increase in housing units and population that could result from implementation of the Project would exceed the growth projections that were used in the GHG quantifications in the City's CAP. As such, buildout of the Project would exceed the GHG projections contained in the CAP, and the Project is not eligible for the CEQA streamlining benefits provided by the CAP SEIR. As such, a quantitative analysis of the Project's potential GHG emissions is provided below.

The California Emission Estimator Model (CalEEMod)^{TM} (v.2013.2) was used to estimate project-level operational GHG emissions for buildout of the Housing Element. GHG emissions generated by operation of the 42 housing sites identified in Table 2.0-1 would consist primarily of CO_2 emissions, with very limited quantities of methane (CH_4) also generated. The development of the 42 sites is not currently proposed; therefore, there is not a detailed application or other information concerning the construction schedule or operational date of these projects. As such, the quantitative analysis of GHG emissions that could result from project implementation focuses on operational GHG emissions from the Project, and a quantification of potential future construction-related GHG emissions is not included.

Carbon dioxide equivalents (CO_2e) provide a universal standard of measurement against which the impacts of releasing (or avoiding the release of) different greenhouse gases can be evaluated. Every greenhouse gas has a Global Warming Potential (GWP), a measurement of the impact that particular gas has on 'radiative forcing'; that is, the additional heat/energy which is retained in the Earth's ecosystem through the addition of this gas to the atmosphere.

Table 3.4-1 shows the CO_2e emissions, which include mobile source, area source, and energy emissions that would result from operations associated with buildout of the Housing Element. The full calculations, inputs, and assumptions are provided in Appendix B.

Some basic mitigation was input into the model to ensure that greenhouse gas emissions are reduced to the extent possible in accordance with state and regional requirements for greenhouse gas emission. These mitigation measures also have benefits for emissions of criteria pollutants, predominately ROG and NOx. As such, the California Emission Estimator Model (CalEEMod)^{TM} (v.2013.2) was used to estimate operational emissions for the Project with the implementation of mitigation measures. Mitigation inputs included the following:

Area Source:

- only using natural gas burning fireplaces/hearths
- low VOC architectural coatings and cleaning supplies.

Energy Source

- Exceed Title 24 by 20%
- Install high efficiency appliances (refrigerator, fans, washers)

TABLE 3.4-1: GHG EMISSIONS FROM SITES PROPOSED FOR GENERAL PLAN LAND USE AND ZONING CHANGES

BUILDOUT OF 42 HOUSING SITES	*UNMITIGATED CO2E (TONS/YEAR)*	*MITIGATED CO2E (TONS/YEAR)*
Area Source GHG Emissions	168.94	83.96
Energy Source GHG Emissions	3,598.98	7,354.37
Mobile Source GHG Emissions	59,354.52	36,538.39
Total Operational GHG Emissions	**63,122.44**	**43,976.72**

SOURCES: CALEEMOD (V.2013.2)

As shown in the table above, implementation of the Project would result in approximately 43,977 tons of CO_2e emissions per year. These emissions would exceed the projected GHG emissions in the CAP.

Future development of the 42 sites identified in Table 2.0-2 would be subject to the mandatory residential GHG reduction measures contained in the CAP, as described below.

MANDATORY GHG REDUCTION MEASURES

> **BE-6. Building Stock: New Construction.** Achieve Tier 1 of Title 24, Part 1 green building standards to exceed minimum Title 24 energy efficiency standards by 15 percent.

This measure requires new development in Elk Grove to meet and exceed California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 11, of the California Code of Regulations, or CALGreen).

The California Code of Regulations (CCR), Title 24 (California Building Standards Code, hereinafter Title 24) includes requirements for the structural, plumbing, electrical, and mechanical systems of buildings and for fire and life safety, energy conservation, green design, and accessibility in and around buildings. This reduction measure is focused on two sections of Title 24: Part 6, the California Energy Code, and Part 11, the California Green Building Standards Code, or CALGreen Code.

The CALGreen Code includes mandatory minimum energy efficiency requirements for buildings. It also establishes two tiers of voluntary measures to achieve greater energy efficiencies and other benefits. Tier 1 is a 15 percent improvement over minimum requirements, and Tier 2 is a 30 percent improvement over minimum requirements.

Future development projects proposed for the opportunity sites would be required to meet the Tier 1 standards of Title 24, consistent with the CAP.

> **BE-10. On-Site Renewable Energy Installations.** Promote voluntary installations of on-site solar photovoltaics in new and existing development, and revise standards to facilitate the transition to solar water heaters and solar photovoltaics in new development.

The goal of this measure is to reduce GHG emissions related to residential and commercial energy use by facilitating the development of small-scale distributed renewable energy production. Renewable energy installations are expected to increase dramatically throughout the next few decades due to innovative financing strategies, lower costs of renewable energy equipment, and

new regulations that require the provision of solar photovoltaic options and solar offsets for new subdivisions.

Future development projects proposed for the opportunity sites would be required to provide solar photovoltaic pre-wiring in all new residential construction, consistent with the CAP.

> **RC-1. Waste Reduction.** The City shall facilitate recycling, reduction in the amount of waste, and reuse of materials to reduce the amount of solid waste sent to the landfill from Elk Grove and achieve an 80 percent diversion by 2020.

Measure RC-1 is intended to increase the proportion of waste diverted from landfills. This measure will be implemented through a range of actions that will be implemented by the City. Actions applicable to residential projects include encouraging the use of recycled concrete in all base material used in private road construction and requiring 65% construction waste diversion.

Future development projects proposed for the opportunity sites would be required to meet the 65% construction waste diversion requirement, consistent with the CAP.

> **TACM-5. Pedestrian and Bicycle Travel.** Provide for safe and convenient pedestrian and bicycle travel through implementation of the Bicycle and Pedestrian Master Plan and increased bicycle parking standards.

The City's Bicycle and Pedestrian Master Plan was completed in 2004 and details the City's anticipated future bikeways and bike and pedestrian facility improvements. This measure includes actions to revise commercial parking standards, require provision of bicycle support facilities for appropriate development, and review office and mixed-use development to address connection and orientation to pedestrian paths, bicycle paths, and existing transit stops within ½ mile of the new development.

Future development of the Housing Element sites would be required to provide one long-term bicycle storage space per multi-family unit, which may include a multitude of options that provide secured bicycle storage. Multi-family development projects must also include internal and off-site pedestrian and bicycle connections that are in excess of those called out in the Bicycle and Pedestrian Master Plan.

> **TACM-9. Efficient and Alternative Vehicles.** Promote alternative fuels and efficient vehicles throughout the community.

This measure achieves reductions in VMT by facilitating the use of electric vehicles by providing charging stations with new development. In order to achieve these reductions, the City will need to ensure the provision of charging stations consistent with the rate of adoption of electric vehicles. The City anticipates the need for as many as 300 stations by 2025 at a rate of approximately 20 per year.

Future development of the Housing Element sites would be required to provide pre-wiring for on-site plug-in stations for electric vehicles, consistent with the CAP.

ADDITIONAL RECOMMENDED GHG REDUCTION MEASURES

In addition to the mandatory GHG reduction measures contained in the CAP that would be required for all new development that may occur following implementation of the Housing Element, the following CAP measures are recommended for implementation by residential projects that are not consistent with the CAP.

> **BE-7. Building Stock: Appliances and Equipment in New Development.** Encourage the use of energy-efficient appliances and equipment in new buildings that maximize efficiency.

New development has a greater opportunity to install energy-efficient appliances that save costs and reduce energy use. Through this measure, the City will promote the voluntary incorporation of Energy Star and high-efficiency equipment and appliances in both residential and nonresidential development.

> **BE-9. Cool Paving Materials.** Encourage the use of high-albedo material for future outdoor surfaces to the greatest extent feasible, including but not limited to parking lots, median barriers, roadway improvements, and sidewalks.

Increasing urban albedo can reduce summertime temperatures, resulting in better air quality and savings from reduced air-conditioning costs. Albedo is the measure of an object's reflectivity. Lighter-colored materials absorb less heat and therefore have a higher albedo ratio.

Increasing urban albedo reduces absorption of incoming solar radiation, countering some effects of increasing GHG concentrations. Pavements and roofs typically constitute over 60 percent of urban surfaces. Using reflective materials can increase both roof and pavement albedo by about 0.25 and 0.15, respectively, resulting in a net albedo increase of about 30 percent. To maximize the albedo of pavement, lighter-colored aggregate can be used in the pavement mix.

Alternatively, asphalt pavements can be covered with high-albedo sealcoats, small rocks set in binder, or a thin layer of concrete. For concrete applications, using lighter-colored sand and cement can increase reflectivity. Cool (lightcolored) pavements also increase nighttime visibility and pavement durability.

> **BE-10. On-Site Renewable Energy Installations.** Promote voluntary installations of on-site solar photovoltaics in new and existing development, and revise standards to facilitate the transition to solar water heaters and solar photovoltaics in new development.

New medium- and high-density residential projects may be required to supply 20 percent of projected electricity use of each building from renewable energy sources. New projects may also be required to achieve certification through SMUD's SolarSmart Homes program and participate in the Homebuyer Solar Option.

> **RC-1. Waste Reduction.** The City shall facilitate recycling, reduction in the amount of waste, and reuse of materials to reduce the amount of solid waste sent to the landfill from Elk Grove and achieve an 80 percent diversion by 2020.

New construction following adoption of the Housing Element may be required to incorporate recycled concrete in private road construction.

> **RC-2. Water Conservation.** Reduce the amount of water used by residential and non-residential uses.

This measure relies primarily on local actions by residents and water rationing by the local water districts. Actions associated with this measure applicable to the Project include promoting the use of drought-tolerant vegetation to minimize water consumption and encouraging the use of drought-tolerant planting and site design to maximize runoff into designated planter areas.

SUMMARY

The implementation of Mitigation Measure 3.4-1 would ensure that future housing projects developed consistent with the Housing Element incorporate measures contained in the CAP, including, but not limited to, measures BE-6, BE-7, BE-9, BE-10, RC-1, RC-2, TACM-5, and TACM-9, in order to reduce GHG emissions to the extent feasible. However, the Project would provide for development levels that are greater than those analyzed in the CAP. As such, the cumulative greenhouse gas impacts associated with the Project are greater than the greenhouse gas emissions projections and analysis in the Elk Grove Sustainability Element and Climate Action Plan Subsequent EIR. Implementation of the Project would result in greenhouse gas emissions beyond the levels assumed in the CAP and analyzed in the SEIR.

Implementation of Mitigation Measure 3.4-1 would ensure that the Project implements the applicable CAP measures described above and reduce potential greenhouse gas emissions to the greatest extent feasible. However, even after implementation of Mitigation Measure 3.4-1, the Project would contribute to an exceedance of the GHG emissions reductions contained in the CAP and analyzed in the CAP SEIR. For this reason, this is considered to be a **significant and unavoidable** impact and the Project would have a cumulatively considerable contribution to the impact. Mitigation Measure 3.4-1 would reduce this impact to the greatest extent feasible, and there is no additional feasible mitigation available that would reduce this impact to a less than significant level.

MITIGATION MEASURES

Mitigation Measure 3.4-1: *Prior to the issuance of building permits, housing projects on the opportunity sites shall demonstrate compliance with the Climate Action Plan, including, but not limited to, measures BE-6, BE-7, BE-9, BE-10, RC-1, RC-2, TACM-5, and TACM-9.*

Timing/Implementation: Prior to issuance of building permits

Enforcement/Monitoring: City of Elk Grove Planning Department

The purpose of this section is to disclose and analyze the potential impacts associated with hazards and hazardous materials related to the Project, and to analyze the potential for exposure of people to hazards and hazardous materials as the Project is built and operated. This section is based in part on the following information: *EnviroStor Website* (DTSC 2013*)*, *GeoTracker* (SWRCB 2013), *City of Elk Grove General Plan* (City of Elk Grove 2003a), and the *Sacramento County Multi-Hazard Mitigation Plan* (Sacramento County 2004). No comments were received during the public review period for the Notice of Preparation regarding this topic.

3.5.1 ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS

Hazardous Materials Defined

For the purposes of this EIR, "hazardous material" is defined as provided in California Health & Safety Code, Section 25501:

- Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

"Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

"Hazardous waste" is a subset of hazardous materials. For the purposes of this EIR, the definition of hazardous waste is essentially the same as that in the California Health & Safety Code, Section 25517, and in the California Code of Regulations (CCR), Title 22, Section 66261.2:

- Hazardous wastes are wastes that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

CCR Title 22 categorizes hazardous waste into hazard classes according to specific characteristics of ignitibility, corrosivity, reactivity, or toxicity. Hazardous waste with any of these characteristics is also known as a Resource Conservation and Recovery Act (RCRA) waste.

Hazardous materials can be categorized as hazardous non-radioactive chemical materials, radioactive materials, toxic materials, and biohazardous materials. The previous definitions are adequate for non-radioactive hazardous chemicals. Radioactive and biohazardous materials are further defined as follows:

- Radioactive materials contain atoms with unstable nuclei that spontaneously emit ionizing radiation to increase their stability.

- Radioactive wastes are radioactive materials that are discarded (including wastes in storage) or abandoned.
- Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute groundwater.
- Biohazardous materials include materials containing certain infectious agents (microorganisms, bacteria, molds, parasites, and viruses) that cause or significantly contribute to increased human mortality or organisms capable of being communicated by invading and multiplying in body tissues.
- Medical wastes include both biohazardous wastes (byproducts of biohazardous materials) and sharps (devices capable of cutting or piercing, such as hypodermic needles, razor blades, and broken glass) resulting from the diagnosis, treatment, or immunization of human beings, or research pertaining to these activities.

Transportation of Hazardous Materials

The transportation of hazardous materials within the City of Elk Grove is subject to various federal, state, and local regulations. The only roadway and transportation route approved for the transportation of explosives, poisonous inhalation hazards, and radioactive materials in the City of Elk Grove Planning Area is Interstate 5. The following provisions are included in the California Vehicle Code (CVC) and pertain to the transportation of hazardous related materials.

- The Highway Patrol designates the routes in California which are to be used for the transportation of explosives. (Section 31616)
- The CVC applies when the explosives are transported as a delivery service for hire or in quantities in excess of 1,000 pounds. The transportation of explosives in quantities of 1,000 pounds or less, or other than on a public highway, is subject to the California Health and Safety Code. (Section 31601(a))
- It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery of, or the loading of, such materials. (Section 31602(b) and Section 32104(a))
- When transporting explosives through or into a city for which a route has not been designated by the Highway Patrol, drivers must follow routes as may be prescribed or established by local authorities. (Section 31614(a))
- Inhalation hazards and poison gases are subject to additional safeguards. These materials are highly toxic, spread rapidly, and require rapid and widespread evacuation if there is loss of containment or a fire. The Highway Patrol designates through routes to be used for the transportation of inhalation hazards. It may also designate separate through routes for the transportation of inhalation hazards composed of any chemical rocket propellant. (Section 32100 and Section 32102(b))

In addition to area roadways, hazardous materials are routinely transported on existing railroad facilities that pass through the City of Elk Grove. The Union Pacific Railroad (UPRR) is within the existing city limits, aligns diagonally north to south, and is located east of SR 99. The Western Pacific Railroad (WPRR) is located in the western portion of the Planning Area, near Interstate 5. The Central California Traction Railroad (CCTRR) aligns north to south near the eastern portion of the City of Elk Grove Planning Area and is also located within the existing city limits (City of Elk Grove, 2003).

SITE CHARACTERISTICS

Hazardous Material Sites

The State of California Hazardous Waste and Substances Site List (also known as the "Cortese List") is a planning document used by the state, local agencies, and developers to comply with the California Environmental Quality Act (CEQA) requirements for providing information about the location of hazardous materials sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (Cal EPA) to annually update the Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for preparing a portion of the information that comprises the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information that is part of the complete list. The CAL-SITES Abandoned Site Program Information System (ASPIS) Database is compiled by Cal-EPA to identify and track potential hazardous waste sites. In addition to the Cortese List and CAL-SITES, the County of Sacramento's Department of Environmental Health also maintains lists of hazardous material sites, releases, and accident occurrences. GeoTracker is a geographic information system (GIS) that provides online access to environmental data and is the interface to the Geographic Environmental Information Management System (GEIMS), a data warehouse which tracks regulatory data about underground fuel tanks, fuel pipelines, and public drinking water supplies.

Searches of the above resources and records identified 53 hazardous material sites in the vicinity of Elk Grove known to handle and store hazardous materials and are associated with a hazardous material related release or occurrence. The terms "release" or "occurrence" include any means by which a substance could harm the environment: by spilling, leaking, discharging, dumping, injecting, or escaping. Of the 53 sites, all but six have been closed or require no action. Tables 3.5-1 and 3.5-2 display the known hazardous material sites in Elk Grove with a description of the hazards provided.

TABLE 3.5-1: GEOTRACKER KNOWN HAZARDOUS MATERIAL RELEASE SITES IN THE CITY OF ELK GROVE

SITE NAME	*SITE TYPE*	*CLEANUP STATUS*	*ADDRESS*
Arcadian Village Elementary School	DTSC	No Action Required	Sheldon Road/Power Inn Road
Arco #2123	LUST	Open - Site Assessment	8500 Elk Grove Blvd
Arco #5696	LUST	Completed - Case Closed	9215 Elk Grove-Florin Road
Arco #5696	LUST	Completed - Case Closed	9215 Elk Grove Blvd
Arlene Hein Elementary School	DTSC	No Action Required	Bellaterra Dr./Terrazzo Dr.
Baker Wells And Pumps	LUST	Completed - Case Closed	8460 Elk Grove Blvd
Century Equipment	LUST	Completed - Case Closed	8821 Stockton Blvd E
Circle-K (Former)	LUST	Completed - Case Closed	8949 Elk Grove Blvd
Citizens Communications	LUST	Completed - Case Closed	9260 Stockton Blv
Conoco Asphalt Terminal	LUST	Completed - Case Closed	10090 Waterman Rd
Cresleigh Ranch No. 39	DTSC	No Action Required	Elk Grove Blvd/Foulks Ranch Dr

Crump Residence	LUST	Completed - Case Closed	9674 Kent St
E & J Market (Former Ss)	LUST	Completed - Case Closed	8706 Stockton Blvd
Edna Batey Elementary	DTSC	No Action Required	Bradshaw Rd/Elk Grove Blvd
Elementary School No. 31	DTSC	No Action Required	Bothwell Dr/Vintage Park Dr
Elk Grove Exxon	LUST	Completed - Case Closed	9603 Stockton Blvd E
Elk Grove Paint And Wallpaper	LUST	Completed - Case Closed	9097 Elk Grove Blvd
Elk Grove Unified School Dist.	LUST	Completed - Case Closed	8820-8800 Elk Grove Blvd
Mather Field Auxiliary (J09ca0797)	DTSC	Inactive - Needs Evaluation	
Elk Grove Expansion Montessori	DTSC	No Action Required	Bradshaw Rd And Elk Grove Blvd.
Elk Grove Montessori	DTSC	No Action Required	Bradshaw Road And Elk Grove Blvd
FAA Remote Repeater	LUST	Completed - Case Closed	Rodgers Rd
Ferrell Gas	LUST	Completed - Case Closed	9765 Dino Drive
Former Elk Grove Ford Facility	LUST	Completed - Case Closed	9483/9499 East Stockton Blvd
Franklin Meadows Elem School No. 37	DTSC	No Action Required	Fire Poppy Dr/Blossom Ranch Dr
Franklin Charter School	DTSC	No Action Required	Atkins Road/Upshaw Way
Harcrow Property	LUST	Completed - Case Closed	9251 Elk Grove Blvd
Harriet G. Eddy Middle School	DTSC	No Action Required	9329 Soaring Oaks Drive
High School/Middle School No. 7	DTSC	No Action Required	Calvine Road/Auberry Drive
Horning Property	LUST	Completed - Case Closed	9020 Elk Grove Blvd
John Taylor Fertilizers	Other Site	Open - Inactive	4707 Twin Cities Rd
Kalwani Property	DTSC	No Further Action	8151 Sheldon Road
Kingsford Prod Co	LUST	Completed - Case Closed	10000 Waterman Rd
Laguna 99 Cleaners	Other Site	Completed - Case Closed	8451 Elk Grove Blvd
Laguna Creek High School Addition	DTSC	No Action Required	9050 Vicino Drive
Laguna Ridge High/Middle School No. 9	DTSC	No Action Required	New Poppy Ridge Rd/Big Horn Blvd
Laguna Stonelake Elementary No. 34	DTSC	No Action Required	Lot F/Laguna Stonelake
Laguna Ridge Elementary School #44	DTSC	No Action Required	Elk Grove Boulevard/Bruceville Rd.
Obie's Dump	DTSC	Active	8437 Sheldon Road
Pleasant Grove Hi/Katherine Albiani Mid	DTSC	Certified	Bond Road/Bradshaw Road
Residence	LUST	Completed - Case Closed	9800 Waterman
Shell Service Station	LUST	Completed - Case Closed	8607 Elk Grove Blvd
Shell Ss	LUST	Completed - Case Closed	8901 Elk Grove Blvd
Tosco #30970 (Was Union #5741)	LUST	Completed - Case Closed	8475 Elk Grove Blvd
Unocal #4829	LUST	Completed - Case Closed	8999 Elk Grove Blvd
Walt Davis Chevy	LUST	Completed - Case Closed	9501 Stockton Blvd
World Asphalt	LUST	Completed - Case Closed	10144 Waterman Rd

SOURCE: SWRCB, GEOTRACKER, 2013

Note: LUST = Leaking Underground Storage Tank, DTSC = California Department of Toxic Substances Control.

DTSC's Brownfields and Environmental Restoration Program (Cleanup Program) EnviroStor database provides DTSC's component of Cortese List data by identifying Annual Workplan (now referred to State Response and/or Federal Superfund), and Backlog sites listed under Health and Safety Code section 25356. In addition, DTSC's Cortese List includes Certified with Operation and Maintenance sites. Table 3.5-2 contains those sites list by DSTC which are not listed in GeoTracker (see Table 3.5-1).

TABLE 3.5-2: ENVIROSTOR KNOWN HAZARDOUS MATERIAL RELEASE SITES IN THE CITY OF ELK GROVE

SITE NAME	*CLEANUP STATUS*	*SITE TYPE*	*ADDRESS*
Proposed Charter School Site	Inactive - Needs Evaluation	School Investigation	9185 Grant Line Road
Wildhawk Elementary School No. 38	No Action Required	School Investigation	Wildhawk West Dr/Prairie Dunes Way
Georgia-Pacific Chemicals	Active	Voluntary Cleanup	10399 E. Stockton Blvd.
Quail Ridge Elementary No. 40	No Action Required	School Investigation	Bilby Road/East Franklin Specific Plan
Miwok Village Elementary School #39b	No Action Required	School Investigation	Elk Grove Blvd./Bilby Rd
Elk Grove USD Critically Overcrowded Sch	No Action Required	School Investigation	Franklin Blvd./Laguna Park Dr Bottom of Form

SOURCE: DTSC ENVIROSTOR 2013

Major Hazardous Material Handling Facilities in the City of Elk Grove

The Suburban Propane facility, which is located at 10450 Grant Line Road, and the Georgia Pacific Resins facility, which is located at 10399 East Stockton Boulevard, are the only major industrial facilities within the City that have the potential to pose off-site hazards. Existing land uses within a one-half mile radius of these facilities consist of light and heavy industrial, office, commercial, residential, and agricultural. Several studies have been conducted to determine the site-specific risks of these two facilities and evaluate the consequences that could be attributed to these facilities (City of Elk Grove 2003, p. 4.4-6). These studies analyzed the hazard types, incidence scenarios, worst-case effects and the extent of those effects, specific conditions associated with worst-case effects, and approximate probabilities associated with each scenario. Off-site hazards to human health and property associated with potential incidents at the Suburban Propane and Georgia Pacific facilities include vapor cloud explosion, radiant heat, flash fire, shrapnel and formaldehyde exposure. The extent of the potential impact for these hazards has been identified in the Elk Grove General Plan EIR and are as follows:

- Vapor Cloud Explosion – out to ¾ mile,
- Radiant Heat (fireball) – out to ½ mile,
- Flash Fire – out to 1 ½ mile,
- Formaldehyde exposure – out to 1 mile, and
- Shrapnel - out to ½ mile (City of Elk Grove 2003, pg. 4.4-26).

3.5.2 REGULATORY SETTING

FEDERAL

The primary federal agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the Environmental Protection Agency (EPA), Department of Labor Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Several laws governing the transport, storage, and use of hazardous materials are governed

by these agencies as well as oversight for contaminated sites cleanup. Federal laws and regulations that are applicable to hazards and hazardous materials are presented below.

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act, as amended, is the basic statute regulating hazardous materials transportation in the United States. The purpose of the law is to provide adequate protection against the risks to life and property inherent in transporting hazardous materials in interstate commerce. This law gives the U.S. Department of Transportation (USDOT) and other agencies the authority to issue and enforce rules and regulations governing the safe transportation of hazardous materials (DOE 2002).

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (the Act) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. The Act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act authorizes the U.S. Department of Transportation Office of Pipeline Safety to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases as well as the transportation and storage of liquefied natural gas. The Office of Pipeline Safety regulates the design, construction, inspection, testing, operation, and maintenance of pipeline facilities. While the federal government is primarily responsible for developing, issuing, and enforcing pipeline safety regulations, the pipeline safety statutes provide for State assumption of the intrastate regulatory, inspection, and enforcement responsibilities under an annual

certification. To qualify for certification, a state must adopt the minimum federal regulations and may adopt additional or more stringent regulations as long as they are not incompatible.

STATE

The primary state agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the California Office of Emergency Services (OES), California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC), California Department of Transportation (Caltrans), California Highway Patrol (CHP), California Water Quality Control Board, and the California Air Resources Board. Several laws governing the generation, transport, and disposal of hazardous materials are administered by these agencies. State laws and regulations that are applicable to hazards and hazardous materials are presented below.

California Health and Safety Code

Cal-EPA has established rules governing the use of hazardous materials and the management of hazardous wastes. Many of these regulations are embodied in the California Health and Safety Code. The code includes regulations that govern safe drinking water, substances control, land reuse and revitalization, remediation, restoration, and methamphetamine contaminated cleanups.

California Code of Regulations Title 22 and Title 26

The California Code of Regulations (CCR) Title 22 provides state regulations for hazardous materials, and CCR Title 26 provides regulation of hazardous materials management. In 1996, Cal/EPA established the "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program) which consolidated the six administrative components of hazardous waste and materials into one program.

LOCAL

City of Elk Grove General Plan

The City of Elk Grove General Plan contains the following goals and policies that are relevant to hazards and hazardous materials aspects of the Project:

Policy SA-2 In considering the potential impact of hazardous facilities on the public and/or adjacent or nearby properties, the City shall consider the hazards posed by reasonably foreseeable events. Evaluation of such hazards shall address the potential for events at facilities to create hazardous physical effects at offsite locations that could result in death, significant injury, or significant property damage. The potential hazardous physical effects of an event need not be considered if the occurrence of an event is not reasonably foreseeable as defined in Policy SA-3. Absent substantial evidence to the contrary, a "hazardous physical effect" from an event shall be a level of exposure to a hazardous physical effect in excess of the levels identified in Policy SA-4.

Policy SA-4 The Maximum Acceptable Exposure standards shown in Table SA-A shall be used in determining the appropriateness of either:

(1) Placing a use near an existing hazardous facility which could expose the new use to hazardous physical effects, or

(2) Siting a hazardous facility that could expose other nearby uses to hazardous physical effects.

Absent substantial evidence to the contrary, the placement of land uses that do not meet the Maximum Acceptable Exposure standards shall be considered to result in a significant, adverse impact for the purposes of CEQA analysis.

Table SA-A: Maximum Acceptable Exposure Criteria For Agricultural, Residential, and Non-Residential Land Uses

Land Use	*Maximum Acceptable Exposure*			
	Overpressure	*Airborne Toxic Substances*	*Radiant Heat*	*Shrapnel*
Residential (all density ranges) (5)	1.0 psig	Dose = ERPG-2(2) ppm for 60 min Exposure time = 60 min *For example: chlorine ERPG-2 = 3 ppm Dose = 3 ppm x 60 min = 180 ppm-min Target concentration = Dose/Exposure time Target concentration = (180 ppm-min) / 60 min Target concentration = 3 ppm chlorine*	Radiant dose = 200 kJ/m2 (3) Exposure time = 30 sec *Target radiant energy = Radiant dose/Exposure time Target radiant energy = (200 kJ/m2) / 30 sec Target radiant energy = 6.67 kW/m2*	All uses shall be located such that the possibility of injury for an unprotected person due to shrapnel released by a reasonably foreseeable event(4) is less than 1/10-6 (1/1,000,000)

(1) psig: pounds per square inch gauge
(2) ERPG-2: Emergency Response Planning Guidelines. The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action; ppm: parts per million
(3) kJ/m2: kiloJoules per square meter (a measure of radiant heat received); kW/m2: kilowatts per square meter; 1.0 kJ/m2 = 1.0 kW/m2 for 1 sec = 1 kW/(m2-sec)
(4) As defined in Policy SA-3
(5) Includes schools, parks, libraries, and other similar public gathering places regardless of their location.

Policy SA-8 Storage of hazardous materials and waste shall be strictly regulated, consistent with state and federal law.

Policy SA-10 Industries which store and process hazardous or toxic materials shall provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone shall be determined by the City of Elk Grove.

City of Elk Grove Municipal Code

Section 23.60.030 Hazardous materials: The use, handling, storage and transportation of hazardous materials comply with all applicable State laws (Section 65850.2 of the Government Code and Section 25505 et seq. of the Health and Safety Code) and that appropriate information is reported to the Fire Department as the regulatory authority.

A. Reporting Requirements. All businesses required by State law (Section 6.95 of the Health and Safety Code) to prepare hazardous materials release response plans and hazardous materials

inventory statements shall, upon request, submit copies of these plans, including any revisions, to the Fire Department.

Sacramento County Multi-Hazard Mitigation Plan

The City of Elk Grove is part of the Sacramento County Multi-Hazard Mitigation Plan (SCMHMP). This plan is a multi-jurisdictional plan that covers the following incorporated communities that participated in the planning process: City of Citrus Heights, City of Elk Grove, City of Folsom, City of Galt, City of Isleton, City of Ranch Cordova, City of Sacramento, and Sacramento County. This plan also covers 69 additional special districts and organizations within Sacramento County that meet the DMA definition of "local government" and participated in the planning process (Sacramento County MHMP 2004, p. 1-2). This plan addresses natural hazards only.

Cosumnes Community Services District - Fire Department

The Cosumnes Community Services District (CCSD) Fire Department Master Plan includes a management and response plan in addition to identification of service level goals. The plan examines future growth in the service area boundaries and identifies manpower, facilities, and equipment needed to meet established goals. The CCSD Fire Department relies on a Fire Development Fee program to fund departmental needs.

3.5.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact from hazards and hazardous materials if it will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

The NOP completed for this Project analyzed impacts regarding hazards and hazardous materials which are listed in Appendix G of the CEQA Guidelines. This analysis determined that while the Project may have a significant impact regarding certain thresholds of significance, others would result in no impact. The topics for which there is no impact are listed below and are not discussed further in this EIR:

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The reader is referred to the NOP for further discussion of these impact areas.

IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: The Project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials, or through the release of hazardous materials into the environment, or emit or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (less than significant)

Implementation of the Project does not, in and of itself, construct new housing in the City. However, the Project does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Project would result in the changing of General Plan land use designations or a rezoning of up to 42 opportunity sites in the City. Sites 2, 3, 4, 5, 6, 7A, C-12, C-13, C-14, C-18, C-19, C-20, C-25, C-33, C-34, C-36, and C-39 are designated to allow high density residential development and would allow multi-family uses under the adopted General Plan land use designations; the zoning changes associated with the Project would allow densities up to 30 dwelling units per acre on these sites. Sites C-1, C-2, C-6 through C-9, C-21 through C-24, C-26 through C-32, C-35, C-37, C-40, and C-41 would have the General Plan land use designation and zoning designation amended to allow high density residential uses at up to 30 dwelling units per acre. The Project would change allowed land uses on up to 353.5 acres in order to accommodate up to approximately 8,843 high density residential units. The potential increase in development density and intensity on the 42 opportunity sites could result in impacts associated with hazardous materials release not discussed in previous General Plan environmental documents.

The City of Elk Grove General Plan has a number of policies designed to reduce the potential for hazardous materials release. Policy SA-2 requires an evaluation of hazards from hazardous facilities on the public and/or adjacent or nearby properties. This evaluation must address the potential for events at facilities to create hazardous physical effects at offsite locations that could result in death, significant injury, or significant property damage. Policy SA-4 addresses the Maximum Acceptable Exposure standards using Table SA-A to determine the appropriateness of either placing a use near an existing hazardous facility which could expose the new use to

hazardous physical effects, or siting a hazardous facility that could expose other nearby uses to hazardous physical effects. Absent substantial evidence to the contrary, the placement of land uses that do not meet the Maximum Acceptable Exposure standards shall be considered to result in a significant, adverse impact for the purposes of CEQA analysis. Policy SA-8 requires the storage of hazardous materials and waste to be strictly regulated, consistent with state and federal law. Policy SA-10 requires a buffer zone for industries which store and process hazardous or toxic materials between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone is to be determined by the City.

The Elk Grove Municipal Code provides regulations pertaining to hazards materials. Section 23.60.030 requires that the use, handling, storage and transportation of hazardous materials comply with all applicable State laws and that appropriate information is reported to the Fire Department as the regulatory authority.

Both the USEPA and the DOT regulate the transport of hazardous waste and material, including transport via highway. The USEPA administers permitting, tracking, reporting, and operations requirements established by RCRA. DOT regulates the transportation of hazardous materials through implementation of the Hazardous Materials Transportation Act. This act administers container design, and labeling and driver training requirements. These established regulations are intended to track and manage the safe interstate transportation of hazardous materials and waste. Additionally, State and Local agencies enforce the application of these acts and provide coordination of safety and mitigation responses in the case that accidents involving hazardous materials occur. Enforcement of these acts and rapid response by local agencies would reduce hazardous materials transportation health hazards to a less than significant level.

Construction activities associated with development of new housing may include refueling and minor maintenance of construction equipment on-site which could lead to minor fuel and oil spills. The use and handling of hazardous materials during construction activities would occur in accordance with applicable Federal, State, and local laws including California Occupational Health and Safety Administration (CalOSHA) requirements. All construction activities would be subject to the NPDES permit process which requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP). Each SWPPP would be reviewed and approved by the Regional Water Quality Control Board.

Neither single family nor multifamily residential units routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common residential grade hazardous materials such as household cleaners, paint, etc. Development of this housing would not emit hazardous emissions or handle hazardous or acutely hazardous materials.

While some of this housing may be located within a ¼ mile of a school, development of this housing would not emit hazardous emissions or handle hazardous or acutely hazardous materials. The General Plan includes several policies to protect those living in the City from the potential of hazardous waste exposure. Additionally, the Municipal Code requires that the use of hazardous materials be in compliance with state law. Both the USEPA and the DOT regulate the transport of hazardous waste and material, including transport via highway. All future housing development projects in the City are required to conform to local, state and federal law with regards to

hazardous material and waste. As such, implementation of the Project does not pose a significant hazard to the public or the environment and would have a **less than significant** impact relative to this issue.

Impact 3.5-2: The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (no impact)

The Sacramento County Multi-Hazard Mitigation Plan addresses the planned response to extraordinary emergency situations associated with disasters affecting the City and the Sacramento area. The plan also addresses integration and coordination with other governmental agencies when required. This plan is not intended to address the day-to-day emergency or well established emergency procedures. The Sacramento County Multi-Hazard Mitigation Plan was developed to meet the requirements of the Disaster Mitigation Act of 2000.

The Project does not propose any policies or programs that would conflict with the City's Emergency Operation Plan, which is part of the Sacramento County Multi-Hazard Mitigation Plan. Future development facilitated by the Project would be located on existing parcels within the City and is not anticipated to encroach on or obstruct any existing evacuation routes. All new development would be required to comply with existing fire codes and ordinances regarding emergency access, such as the required widths, surfaces, vertical clearance, brush clearance, and allowable grades. The City would implement emergency response measures to address emergency management, including notifications, evacuations, and other necessary measures in the event of an emergency. The Project would not impede or conflict with the policies contained in the Sacramento County Multi-Hazard Mitigation Plan and there would be **no impact** relative to this topic.

Impact 3.5-3: Implementation of the Project would not result in impacts from being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (no impact)

Implementation of the Project does not, in and of itself, construct new housing in the City. However, as described in Section 2.0 Project Description, implementation of the Project would result in the changing of General Plan land use designations and/or a rezoning of up to 42 opportunity sites in the City.

As shown in Tables 3.5-1 and 3.5-2, there are 53 hazardous material release sites in the City. Six of these sites, listed below, are open or need evaluation.

TABLE 3.5-3: HAZARDOUS MATERIAL RELEASE SITES WITH OPEN OR NEED EVALUATION STATUS

SITE NAME	*SITE TYPE*	*CLEANUP STATUS*	*ADDRESS*
Arco #2123	LUST	Open - Site Assessment	8500 Elk Grove Blvd
Mather Field Auxiliary (J09ca0797)**	DTSC	Inactive - Needs Evaluation	
John Taylor Fertilizers	Other Site	Open - Inactive	4707 Twin Cities Rd
Obie's Dump	DTSC	Active	8437 Sheldon Road
Proposed Charter School Site	School Investigation	Inactive - Needs evaluation	9185 Grant Line Road
Georgia-Pacific Chemicals	Voluntary Cleanup	Active	10399 E. Stockton Blvd.

All of the six open/need evaluation sites are currently occupied or are not designated for residential uses. Development of the 42 opportunity sites would not be located on any of these sites. For the remaining 47 hazardous material release sites, the cleanup was completed or no action was necessary. Therefore, implementation of the Project would have **no impact** relative to this topic.

REFERENCES

California Department of Toxic Substance Control 2013. *EnviroStor Website 2013.* Accessed 2/20/2013.

California State Water Resources Control Board 2013. *GeoTracker, 2013.* Accessed 2/20/2013.

California State Military Museum 2013. http://www.militarymuseum.org/ElkGroveAuxField.html. Accessed 6/3/2013.

City of Elk Grove 2003. *City of Elk Grove General Plan.* Elk Grove, California. August 2003.

Sacramento County 2004. Multi-Hazard Mitigation Plan. December 2004. Sacramento, CA.

This section describes the regulatory setting, regional hydrology and water quality, impacts that are likely to result from Project implementation, and measures to reduce potential significant impacts to hydrology and water quality. The NOP completed for the Project determined that the Project would not expose persons or structures to inundation by seiche, tsunami, or mudflow; therefore this subject will not be discussed in this Draft EIR. The reader is referred to the NOP for further analysis on this subject.

This section is based in part on the following documents, reports and studies: *Which Lakes, Streams, or Ocean Locations Are Listed By The State As Impaired?* (California Water Quality Control Monitoring Council 2012), *City of Elk Grove General Plan* (City of Elk Grove 2003a), *City of Elk Grove General Plan Environmental Impact Report* (City of Elk Grove 2003b), *Elk Grove General Plan Background Report* (City of Elk Grove 2003c), *Storm Drainage Master Plan, Volume II* (City of Elk Grove 2011a), *Storm Drainage Master Plan Draft Environmental Impact Report* (City of Elk Grove 2011b), *Custom Soil Resource Report for Sacramento County, California* (USDA 2013), *California's Groundwater Update [Sacramento Valley Groundwater Basin, South American Sub-Basin]* (DWR 2006), *About Elk Grove* (Elk Grove Chamber of Commerce 2013), *2010 Urban Water Management Plan* (Elk Grove Water District 2011), *California Lakes and Reservoirs Impaired by Mercury* (State Water Resources Control Board 2012), and *Ground-Water Quality Data in the Southern Sacramento Valley, California, 2005—Results from the California GAMA Program* (United Stated Geological Survey (USGS) 2005.

No comments were received during the public review period for the Notice of Preparation regarding this topic.

3.6.1 EXISTING SETTING

REGIONAL HYDROLOGY

Surface Water

The City is located in the Sacramento River Hydrological Region, which covers approximately 17 million acres (27,000 square miles) and extends from the Modoc Plateau and Cascade Range at the Oregon border south to the Sacramento- San Joaquin Delta. The Sacramento River Basin includes the entire area drained by the Sacramento River. For planning purposes, the Sacramento River Basin includes all of the watersheds that are tributary to the Sacramento area north of the Cosumnes River watershed. The City is located in the Morrison Creek Stream Group Drainage Basin. This 192-square-mile drainage basin drains much of the area designated for urban development in the county. Stormwater in most of the basin flows west through Morrison, Laguna, Elder, and Elk Grove creeks and other associated creeks to the Beach Stone Lakes basin west of I-5 (Elk Grove 2011b, pg. 3.6-1).

The region includes the Sacramento River, the longest river system in California, and its tributaries. The Sacramento River Hydrological Region is the main water supply for many of California's urban and agricultural areas. The hydrological region normally receives 90 percent of its annual precipitation during the wet season (approximately October to April) with rain in the lower elevations and snow in the higher elevations. Snowmelt occurring in the late spring and early summer months contributes to large stream flows in the spring.

LOCAL DRAINAGE

The City's drainage area encompasses both urbanized and rural areas within the City, which covers over 26,000 acres in the southern portion of Sacramento County. The terrain throughout the City is relatively flat, with natural creeks and channels traversing the area. The eastern portion of the City is predominantly rural, with residences built on large lots where animal raising is common.

The City drains within thirteen major watersheds as shown on Figure 3.6-1. Within the watersheds there are ten major natural creeks or open channels that convey stormwater runoff within the City including: Deer Creek, Whitehouse Creek, Elk Grove Creek, Grant Line Channel, Laguna Creek, Laguna West Channel, Shed A Channel, Shed B Channel, Shed C Channel, and Strawberry Creek. Four of the creeks convey runoff that originates outside of the city limits: Deer Creek, Elk Grove Creek, Laguna Creek, and Strawberry Creek. All of the watersheds in the city ultimately drain into the Beach Stone Lakes area of the county, with the exception of the Deer Creek and Grant Line Channel watersheds, which drain to Deer Creek and ultimately to the Cosumnes River (City of Elk Grove 2011b, pg. 3.6-1). These watersheds are described in detail below.

Laguna Creek Watershed - Laguna Creek is the largest stream in the City. Runoff in the watershed flows generally to the southwest until the Creek reaches Waterman Road where it bends, flowing to the northwest, toward its confluence with Morrison Creek. The total watershed area, at the confluence of Morrison Creek, is approximately 48 square miles. The headwaters of Laguna Creek begin in the City of Rancho Cordova to the northeast. Laguna Creek flows into the City at Calvine Road, picking up Whitehouse Creek and Elk Grove Creek before leaving the City boundaries near Sheldon Road. The Creek then picks up flows from Jacinto Creek within the Sacramento city limits and joins Morrison Creek just east of I-5. In Elk Grove, Laguna Creek has been altered by development (City of Elk Grove 2011a, pg. 4-1).

Whitehouse Creek Watershed - Whitehouse Creek drains a watershed of approximately 1,030 acres and is a major tributary to Laguna Creek. The watershed is approximately bounded by SR 99 to the west, Sheldon Road to the north, Waterman Road to the east, and Bond Road to the south. The Creek begins northeast of the intersection of Bond and Waterman Roads and flows to the west for approximately 1.5 miles, then turns south and continues for approximately 0.5 miles before joining Laguna Creek 1,200 feet upstream of SR 99 (City of Elk Grove 2011a, pg. 7-1).

SURFACE WATER QUALITY

Potential hazards to surface water quality include the following nonpoint pollution problems: high turbidity from sediment resulting from erosion of improperly graded construction projects, concentration of nitrates and dissolved solids from agriculture or surfacing septic tank failures, contaminated street and lawn run-off from urban areas, and warm water drainage discharges into cold water streams.

The most critical period for surface water quality is following a rainstorm which produces significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminates in the low flowing stream. Such conditions are most frequent during the fall at the beginning of the rainy season when stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions.

Urban stormwater runoff was managed as a non-point discharge (a source not readily identifiable) under the Federal Water Pollution Control Amendments of 1972 (PL 92-500, Section 208) until the mid-1980's. However, since then, the Federal Environmental Protection Agency has continued to develop implementing rules which categorize urban runoff as a point source (an identifiable source) subject to National Pollution Discharge Elimination System (NPDES) permits. Rules now affect medium and large urban areas, and further rulemaking is expected as programs are developed to meet requirements of Federal water pollution control laws.

Surface water pollution is also caused by erosion. Excessive and improperly managed grading, vegetation removal, quarrying, logging, and agricultural practices all lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In slower moving water bodies these same factors often cause a buildup of siltation, which ultimately reduces the capacity of the water system to percolate and recharge groundwater basins, as well as adversely affecting both aquatic resources and flood control efforts.

303(d) Impaired Water Bodies: Section 303(d) of the federal Clean Water Act requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

Table 3.6-1 identifies waterbodies in Sacramento County which are 303(d) listed as impaired, including the pollutant of concern.

TABLE 3.6-1: 303(D) LISTED IMPAIRED WATERBODIES IN SACRAMENTO COUNTY

WATERBODY	*AFFECTED AREA*	*POLLUTANT OF CONCERN*
American River, Lower (Nimbus Dam to confluence with Sacramento River)	27 miles	Mercury, PCBs, unknown
Arcade Creek	10 miles	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity
Carson Creek (from WWTP to Deer Creek)	12 miles	Aluminum, Manganese
Chicken Ranch Slough	8 miles	Chlorpyrifos, Diazinon, Pyrethroids, Sediment Toxicity
Cosumnes River, Lower (below Michigan Bar)	36 miles	Escherichia coli (E. coli), Invasive Species, Sediment Toxicity
Cosumnes River, Upper (above Michigan Bar)	17 miles	Invasive Species
Deer Creek	12 miles	Iron
Delta waterways: Central portion	11,425 acres	Mercury
		DDT, Group A Pesticides
Delta waterways: Eastern portion	2,972 acres	Mercury
		DDT, Group A Pesticides
Delta waterways: Northern portion	6,795 acres	Mercury
		Polychlorinated Biphenyls (PCBs)
		DDT, Group A Pesticides
Delta waterways: Western portion	14,524 acres	Mercury
		DDT, Group A Pesticides
Elder Creek	11 miles	Chlorpyrifos, Diazinon, Pyrethroids, Sediment Toxicity
Elk Grove Creek	7 miles	Chlorpyrifos, Diazinon,
Mokelumne River, Lower	34 miles	Chlorpyrifos, Copper, Mercury, Oxygen, Dissolved,

		Unknown Toxicity, Zinc
Morrison Creek	26 miles	Diazinon, Pentachlorophenol (PCP), Pyrethroids, Sediment Toxicity
Natomas East Main Drainage Canal (aka Steelhead Creek, downstream of Arcade Creek)	3 miles	Polychlorinated Biphenyls (PCBs)
Natomas East Main Drainage Canal (aka Steelhead Creek, upstream of Arcade Creek)	12 miles	Polychlorinated Biphenyls (PCBs)
Sacramento River (Knights Landing to the Delta)	16 miles	Mercury
Sacramento-San Joaquin Delta-	41,736 acres,	Mercury,
		Polychlorinated Biphenyls (PCBs)
		Chordane, DDt, Dieldrin
		Dioxin Compounds (including 2,3,7,8-TCDD), Furan Compounds, PCBs (Polychlorinated biphenyls) (dioxin-like)
Strong Ranch Slough	6 miles	Chlorpyrifos, Diazinon, Pyrethroids, Sediment Toxicity

Source: State Water Resources Control Board, CalEPA. 2011

According to the State Water Resources Control Board, there are three lakes in Sacramento County that are impaired. These are:

- Beach Lake, mercury
- Folsom Lake, mercury
- Lake Natoma, mercury

Groundwater

The City is located within the Sacramento Valley Groundwater Basin and South American Sub-basin. This aquifer system is part of a regional aquifer system that extends beyond Sacramento County into the Central Valley. The South American sub-basin is comprised of continental deposits of Late Tertiary to Quaternary age that are bounded on the east by the Sierra Nevada mountain range, on the west by the Sacramento River, on the north by the American River, and on the south by the Cosumnes and Mokelumne Rivers (DWR 2006, Pg. 1). These perennial rivers generally create a groundwater divide in the shallow subsurface. It is clear that there is interaction between groundwater of adjacent sub-basins at greater depths (DWR 2006, pg. 1). Furthermore, this aquifer system recharges from a combination of sources including stream recharge primarily from the American, Cosumnes, Mokelumne, and Sacramento Rivers, subsurface inflows from adjacent counties, and percolation of rainfall and applied water.

The South American sub-basin aquifer system is comprised of continental deposits of Late Tertiary to Quaternary age. These deposits include Younger Alluvium (consisting of flood basin deposits, dredge tailings, and Holocene stream channel deposits), Older Alluvium, and Miocene/Pliocene Volcanics. The cumulative thickness of these deposits increases from a few hundred feet near the Sierra Nevada foothills on the east to over 2,500 feet along the western margin of the subbasin.

Geologically, the Sacramento Valley is a large trough filled with sediments having variable permeability rates; as a result, wells developed in areas with coarser aquifer materials will produce larger amounts of water than wells developed in fine aquifer materials. In general, well yields in the Sacramento Valley are good and range from one-hundred to several thousand gallons per minute (City of Elk Grove 2008, pg. 4.7-2). As surface water supplies have been so abundant in the

Sacramento Valley, groundwater supply primarily supplements the surface water supply. Yet with changing environmental laws and requirements, this balance is shifting to a greater reliance on groundwater, and conjunctive use of both supplies is occurring to a greater extent throughout the Sacramento Valley, particularly in drought years (City of Elk Grove 2008, pg. 4.7-2).

Two aquifer formations underlie the Elk Grove area. The first and shallower aquifer (Laguna Formation) extends 200 to 300 feet below ground level. The second and deeper aquifer (Mehrten Formation) separated from the shallower aquifer by a discontinuous clay layer, averages 1,600 feet thick. Extraction from the South Sacramento groundwater basin has formed a cone-of-depression in the groundwater table centered south of Elk Grove Boulevard between Interstate 5 and SR 99 (City of Elk Grove 2003b, pg. 4.8-9).

GROUNDWATER QUALITY

Generally, groundwater in the Sacramento Valley has lower dissolved-solids concentrations than other sub regions in the Central Valley, with dissolved-solids concentrations increasing as the depth increases in the aquifer system. Groundwater in predominantly agricultural areas (i.e., southern and eastern portions of the county) can become excessively saline and damaging to crops because evaporation of sprayed irrigation water and evapotranspiration of soil moisture and shallow groundwater leaves behind dissolved salts. As a result, the concentration of salts in the soil and shallow groundwater increases may reach levels detrimental to plant growth.

The maximum recommended nitrate concentration for drinking water by the USEPA is 10 milligrams per liter. Some crops may be affected by nitrate concentrations as low as five milligrams per liter. Occurrences of nitrate in concentrations of greater than five milligrams per liter are sporadic in the project area and seem to be confined mainly to the shallow parts of the aquifer. The contamination is usually attributable to local sources, such as septic tanks, feedlots, and dairies (City of Elk Grove 2003b, pg. 4.8-15).

The Ground-Water Ambient Monitoring and Assessment (GAMA) Statewide Basin Assessment project was developed in response to the Ground-Water Quality Monitoring Act of 2001 and is being conducted by the California State Water Resources Control Board (SWRCB) in collaboration with the U.S. Geological Survey (USGS) and the Lawrence Livermore National Laboratory (USGS 2005, pg. 1). The purpose of this report is to present the analytical results and quality-control (QC) analyses for organic, inorganic, and microbial constituents, and general water-quality parameters for ground-water samples collected from 83 wells in the Southern Sacramento Valley GAMA study unit (USGS 2005, pg. 1).

The City is located in the Southern Sacramento Valley study unit (SSACV) for the purposes of the GAMA. The GAMA defined boundaries of the South American (SAM) study area closely match those defined by the Department of Water Resources (DWR) for the "South American Subbasin". Ground-water quality in the approximately 2,100 square-mile Southern Sacramento Valley study unit (SSACV) was investigated from March to June 2005 as part of the Statewide Basin Assessment Project of Ground-Water Ambient Monitoring and Assessment (GAMA) Program. This study was designed to provide a spatially unbiased assessment of raw ground-water quality within SSACV, as well as a statistically consistent basis for comparing water quality throughout California. Samples were collected from 83 wells in Placer, Sacramento, Solano, Sutter, and Yolo Counties. Sixty-seven of the wells were selected using a randomized grid-based method to provide statistical

representation of the study area. Sixteen of the wells were sampled to evaluate changes in water chemistry along ground-water flow paths. Four additional samples were collected at one of the wells to evaluate water-quality changes with depth. This study did not evaluate the quality of water delivered to consumers; after withdrawal from the ground, water typically is treated, disinfected, and (or) blended with other waters to maintain acceptable water quality (USGS 2005, pg. 6).

Relative-concentrations (sample concentration divided by the benchmark concentration) were used for evaluating groundwater quality for those constituents that have Federal and (or) California benchmarks for drinking-water quality. Aquifer-scale proportion was used as a metric for evaluating regional-scale groundwater quality. High aquifer-scale proportion is defined as the percentage of the primary aquifers with relative-concentration greater than 1.0 for a particular constituent or class of constituents; proportion is based on an areal rather than a volumetric basis. Moderate and low aquifer-scale proportions were defined as the percentage of the aquifer with moderate and low relative-concentrations, respectively. Two statistical approaches, grid-based and spatially-weighted, were used to evaluate aquifer-scale proportion for individual constituents and classes of constituents (USGS 2008, pg 60).

Inorganic constituents with health-based benchmarks occurred at high relative-concentrations, in 30 percent of the primary aquifers in the SSACV. The constituent contributing most frequently to these high aquifer-scale proportions was arsenic. Inorganic constituents with non-regulatory, aesthetic/technical-based benchmarks were high in 32 percent of the primary aquifers in the SSACV. The primary constituent contributing to these high aquifer-scale proportions was manganese (USGS 2008, pg 60).

Organic constituents were present at high relative-concentrations in less than 1 percent of the primary aquifers in the SSACV. Moderate relative-concentrations occurred in 2.6 percent in the study area. The detection frequencies for seven organic and special-interest constituents were greater than or equal to 10 percent, atrazine and chloroform, in the SSACV; perchloroethene, and trichloroethene (USGS 2008, pg. 60).

GROUNDWATER RECHARGE

Groundwater in the Elk Grove area occurs in both the upper shallow aquifer zone and in the underlying deeper aquifer zone. The deeper aquifer is composed primarily of the Mehrten Formation and is separated from the shallow aquifer by a discontinuous clay layer. The thickness of the deep aquifer ranges from approximately 200 feet thick in the eastern portion of the County to over 2,000 feet thick in some of the western portions of the County (City of Elk Grove 2003b, pg. 4.8-9).

As mentioned above, a discontinuous clay layer that is not completely impermeable in some areas separates the shallow and deep aquifers. Therefore, there is a potential for vertical movement of groundwater between the two aquifers. Generally, the movement of groundwater between the aquifers occurs when a head differential exists between the aquifer systems. For instance, if heavy pumping in the deep aquifer reduces the pressure head in this system then groundwater from the shallow aquifer will be induced to recharge the deeper aquifer. Conversely, if groundwater levels are decreased (by increased pumping) in the shallow aquifer then the potential exists for the upward movement of groundwater to recharge the shallow aquifer (City of Elk Grove 2003b, pg. 4.8-9).

Recharge to the aquifer system in the Elk Grove area occurs from a combination of three main sources: stream recharge (primarily from the Cosumnes and Sacramento rivers), subsurface inflows from adjacent areas, and percolation of rainfall and applied water. Large areas on both sides of the Cosumnes River, as well as, a small portion around the Sacramento River have high to moderate recharge capabilities (see Figure 3.6-2). The majority of the Elk Grove area has poor groundwater recharge capabilities. Groundwater contours in the Elk Grove Planning Area are generally ten feet or more below sea level and range from approximately fifty feet below sea level to 30 feet above sea level. In the City, the lowest point is located under Bruceville Road, south of Elk Grove Boulevard. The highest point in the City is located generally west of Grant Line Road (City of Elk Grove 2003b, pg. 4.8-9).

Stormwater

The Sacramento Coordinated Water Quality Monitoring Program (CMP) conducts water quality monitoring on the Sacramento and American Rivers to comply with National Pollution Discharge Elimination System (NPDES) permit requirements. The CMP characterizes ambient water quality conditions in the Valley, including Elk Grove. Most recently, the CMP conducted six sampling events from July 2009 through June 2010. The vast majority of the constituents measured in 2009–2010 indicated compliance with existing water quality objectives from the California Toxics Rule, the Water Quality Control Plan for the Sacramento River Watershed (Basin Plan), and U.S. Environmental Protection Agency (USEPA) criteria for ammonia and *E. coli* bacteria (City of Elk Grove 2011b, pg. 3.6-11).

Exceedances of water quality objectives were observed for a few constituents, including the indicator bacteria *E. coli* and fecal coliform, and the metals total aluminum and total iron. However, occasional exceedances are typical for these constituents, and two of the three events with bacteria exceedances were storm events, when higher bacteria levels are typical. While the total iron and total aluminum exceedances in the Sacramento River are typical, they are not officially considered exceedances because the objectives are based on Title 22 drinking water maximum contaminant levels. Dissolved concentrations were below those objectives. Finally, four polynuclear aromatic hydrocarbons, which are byproducts of fuel burning, were detected at concentrations exceeding their lowest applicable water quality objective (0.0044 µg/L) during one event at one site. Exceedances of such low thresholds are not uncommon in urban waterway. In addition, the City performs regular maintenance on its storm drain system in order to remove waste and associated potential pollutants before they drain to waterways (City of Elk Grove 2011b, pg. 3.6-11).

Flooding

Flooding events can result in damage to structures, injury or loss of human and animal life, exposure of waterborne diseases, and damage to infrastructure. In addition, standing floodwater can destroy agricultural crops, undermine infrastructure and structural foundations, and contaminate groundwater. Flood zones are geographic areas that the Federal Emergency Management Agency (FEMA) has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

Figure 3.6-3 shows the FEMA flood zones for the City as well as the 42 opportunity sites listed in the Housing Element. The majority of the City is not within a 100-year or 500-year flood zone.

Figure 3.6-4 identifies the potential dam inundation areas within the City due to dam failure of Folsom and Nimbus Dams. As shown, only the very western part of the City has the potential for flood inundation as a result of failure of the Folsom and Nimbus Dams.

3.6.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the water resources of the State and nation, including the Federal Emergency Management Agency, the US Environmental Protection Agency, the State Water Resources Control Board, and the Regional Water Quality Control Board. The following is an overview of the federal, State, and local regulations that are applicable to the Project.

FEDERAL AND STATE

Clean Water Act (CWA)

The Clean Water Act (CWA), initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for stormwater discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2003-0005-DWQ) for small MS4s covered under the CWA to efficiently regulate numerous stormwater discharges under a single permit. Permitees must meet the requirements in Provision D of the General Permit, which require the development and implementation of a Stormwater Management Plan (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable. The SWMP must include the following six minimum control measures:

1) Public Education and Outreach on Stormwater Impacts
2) Public Involvement/Participation
3) Illicit Discharge Detection and Elimination
4) Construction Site Stormwater Runoff Control
5) Post-Construction Stormwater Management in New Development
6) Redevelopment and Pollution Prevention/Good Housekeeping for Municipal Operations

Federal Emergency Management Agency (FEMA)

Sacramento County is a participant in the National Flood Insurance Program (NFIP), a Federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations.

California Water Code

The Federal Clean Water Act places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the states, although this does establish certain guidelines for the States to follow in developing their programs and allows the Environmental Protection Agency to withdraw control from states with inadequate implementation mechanisms.

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region the regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

The Water Code Section 13260 requires all dischargers of waste that may affect water quality in waters of the state to prepare a water quality discharge report to the RWQCB. Section 13260a-c is as follows:

"(a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board:

> *(1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.*

(2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.

(3) A person operating, or proposing to construct, an injection well.

(b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.

(c) Each person subject to subdivision (a) shall file with the appropriate regional board a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge."

National Pollutant Discharge Elimination System (NPDES)

NPDES permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the Environmental Protection Agency Regional Administrator. The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti- degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWC.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and are therefore to be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the RWQCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issues general permits for stormwater runoff from construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Valley Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

Water Quality Control Plan for the Sacramento River and San Joaquin River Basins

The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards,"

as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

LOCAL

City of Elk Grove General Plan

The General Plan contains the following goals and policies that are relevant to hydrology and water quality aspects of the Project:

Policy CAQ-1 Reduce the amount of water used by residential and non-residential uses by encouraging water conservation.

CAQ-1-Action 1 Implement the City's Water Conservation Ordinance.

Policy CAQ-5 Roads and structures shall be designed, built and landscaped so as to minimize erosion during and after construction.

Policy CAQ-12 The City shall seek to ensure that the quality of groundwater and surface water is protected to the extent possible.

CAQ-12-Action 2 Implement the City's NPDES permit on all public and private development projects and activities.

Policy CAQ-13 Implement the City's NPDES permit through the review and approval of development projects and other activities regulated by the permit.

Policy CAQ-14 The city shall seek to minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and use on-site infiltration of runoff in areas with appropriate soils where the infiltration of storm water would not pose a potential threat to groundwater quality.

Policy CAQ-18 Post-development peak storm water runoff discharge rates and velocities shall be designed to prevent or reduce downstream erosion, and to protect stream habitat.

Policy CAQ-19 Encourage the retention of natural stream corridors and the creation of natural stream channels where improvements to drainage capacity are required.

CAQ-19-Action 6 All storm drainage improvements on natural streams shall be designed where feasible to maintain water flows necessary to protect and enhance existing fish habitat, native riparian vegetation, water quality, and/or ground water recharge.

CO-19-Action 8 Development design shall maximize the total floodplain frontage that is open to public view. Development adjacent to stream corridors shall be encouraged to provide a public street paralleling at least one side of the corridor with vertical curbs, gutters, foot path, street lighting, and post and cable barriers to prevent vehicular entry.

Policy CAQ-20 Fill may not be placed in any 100-year floodplain as delineated by currently effective FEMA Flood Insurance Rate Maps or subsequent comprehensive drainage plans unless specifically approved by the City. No fill shall be permitted in wetland areas unless approved by the City and appropriate state and federal agencies.

Policy CAQ-21 Development adjacent to a natural stream(s) shall provide a "stream buffer zone" along the stream. "Natural streams" shall be generally considered to consist of the following, subject to site-specific review by the City:

- Deer Creek
- Elk Grove Creek
- Laguna Creek and its tributaries
- Morrison Creek
- Strawberry Creek
- White House Creek

Policy CAQ-23 Uses in the stream corridors shall be limited to recreation and agricultural uses compatible with resource protection and flood control measures. Roads, parking, and associated fill slopes shall be located outside of the stream corridor, except at stream crossings.

Policy CAQ-24 Open space lands within a stream corridor shall be required to be retained as open space as a condition of development approval for projects that include a stream corridor. Unencumbered maintenance access to the stream shall be provided.

Policy SA-13 The City shall require that all new projects not result in new or increased flooding impacts on adjoining parcels on upstream and downstream areas.

Policy SA-14 The City shall give priority to the designation of appropriate land uses in areas subject to flooding to reduce risks to life and property. Construction of new flood control projects shall have a lower priority, unless land use controls (such as limiting new development in flood-prone areas) is not sufficient to reduce hazards to life and property to acceptable levels.

Policy SA-15 Development shall not be permitted on land subject to flooding during a 100- year storm event, based on the most recent floodplain mapping prepared by the Federal Emergency Management Agency (FEMA) or updated mapping acceptable to the City of Elk Grove. Potential development in areas subject to flooding may be clustered onto portions

of a site which are not subject to flooding, consistent with other policies of this General Plan.

Policy SA-16 A buildable area outside the 100-year floodplain must be present on every residential lot sufficient to accommodate a residence and associated structures. Fill may be placed to create a buildable area only if approved by the City and in accordance with all other applicable policies and regulations.

The use of fill in the 100-year floodplain to create a buildable area is strongly discouraged, and shall be subject to review to determine potential impacts on wildlife, habitat, and flooding on other parcels.

Policy SA-17 Vehicular access to the buildable area of all parcels must be at or above the 10-year flood elevation.

Policy SA-18 Creation of lots whose access will be inundated by flows resulting from a 10-year or greater storm shall not be allowed. Bridges or similar structures may be used to provide access over creeks or inundated areas, subject to applicable local, state, and federal regulations.

Policy SA-19 Discourage the number of creek crossings in order to reduce potential flooding and access problems.

SA-19-Action 1 Lots which will contain two or more buildable areas on both sides of a creek or floodplain shall be discouraged.

Policy SA-20 Parcels should not be created on which the presence of easements, floodplain, marsh or riparian habitat, or other features would leave insufficient land to build and operate structures. This policy shall not apply to open space lots specifically created for dedication to the City or another appropriate party for habitat protection, flood control, drainage, or wetland maintenance.

Policy SA-21 Where necessary due to clear dangers to life or property, the City will support the construction of flood control projects.

SA-21-Action 1 The City will participate through the Sacramento Area Flood Control Agency in obtaining federal authorization for construction of a backbone flood control project along the Sacramento and American Rivers and the immediate connection of local internal streams to these rivers.

SA-21-Action 2 The City will continue local efforts that encourage implementation of the Federal Flood Insurance Program.

SA-21-Action 3 The City will participate with the City of Sacramento, the Army Corps of Engineers and other Federal, State and local governments and agencies to develop policies to finance, construct, and plan flood improvements to eliminate flooding in Elk Grove.

Policy SA-22 New and modified bridge structures shall not cause an increase in water surface elevations of the 100-year floodplain exceeding one foot, unless analysis clearly indicates that the physical and/or economic use of upstream property will not be adversely affected.

Policy SA-23 The City shall require all new urban development projects to incorporate runoff control measures to minimize peak flows of runoff and/or assist in financing or otherwise implementing Comprehensive Drainage Plans.

SA-23-Action 1 As part of the review of development projects, ensure that runoff control measures are planned and provided.

Policy SA-24 Drainage facilities should be properly maintained to ensure their proper operation during storms.

City of Elk Grove Municipal Code

STORMWATER MANAGEMENT AND DISCHARGE CONTROL, CHAPTER 15.12

The intent of the Stormwater Management and Discharge Control Chapter (Elk Grove Municipal Code, Chapter 15.12) is to protect and enhance the water quality of watercourses, water bodies, and wetlands within the City in a manner consistent with the federal CWA, the Porter-Cologne Water Quality Control Act, and the NPDES permit by controlling the contribution of urban pollutants to stormwater runoff which enters the City's drainage conveyance system.

Chapter 15.12 of the City Municipal Code provides the City with the legal authority to accomplish the following goals:

- To reduce the discharge of pollutants in stormwater to the maximum extent practicable; To effectively prohibit non-stormwater discharges into the City drainage conveyance system;
- To comply with the requirements of the federal CWA, the Porter-Cologne Water Quality Control Act, and the NPDES permit as they apply to the discharge of pollutants into and from the City drainage conveyance system;
- To fully implement a comprehensive Stormwater Quality Management Program as approved by the RWQCB; To protect the physical integrity and function of the City drainage conveyance system from the effects of pollutants and materials other than stormwater;
- To prevent the contamination of groundwater as a result of pollution migration from the City drainage conveyance system;
- To promote cost-effective management and beneficial use of sediments in the City drainage conveyance system;
- To protect the health and safety of maintenance personnel and the public who may be exposed to pollutants in the City drainage conveyance system;
- To provide for the recovery of regulatory costs incurred by the City in the implementation of its Stormwater Quality Management Program, including, but not limited to, enforcement activities, inspections, investigations, sampling, and monitoring; and
- To establish appropriate enforcement procedures and penalties for violations.

LAND GRADING AND CONTROL, CHAPTER 16.44

The City regulates land grading and erosion in order to minimize damage to surrounding properties and public right-of-way, the degradation of the water quality of watercourses, and the disruption of natural drainage flows. The Land Grading and Erosion Control Chapter 16.44 establishes administration procedures, minimum standards of review, and implementation and enforcement procedures for controlling erosion, sedimentation, and other pollutant runoff associated with construction activities.

ZONING, TITLE 23

Whereas the City's General Plan describes land use in a broad sense, its Zoning (Title 23 of the Municipal Code) more specifically describes the zone classification and associated allowable uses for each piece of property in the City. For each zone classification, standards such as minimum lot size, maximum building height, building setbacks, and maximum lot coverage are specified. Prior to building permit issuance, the project proponent must demonstrate that the proposal complies with the applicable zoning requirements. Zoning Title 23 can indirectly affect water quality; for example, limits on lot coverage result in more vegetated areas to infiltrate and filter runoff and less impervious surface. Further, Section 23.42.040 of Title 23 establishes the flood combining district, which is applied to all land covered by rivers, creeks, and streams and land subject to flooding and restricts development within the flood combining district to ensure that base elevations are consistent with the City's performance standards established at Section 23.60.020. Zoning Title 23 also specifies water quality treatment requirements for parking lots such as vegetated swales in landscape areas between parked cars or might require the use of pervious pavement..

WATER EFFICIENT LANDSCAPE REQUIREMENTS, CHAPTER 14.10

The Water Use and Conservation Chapter 14.10 defines the standards and procedures for the design, installation, and management of landscapes in order to utilize available plant, water, land, and human resources to the greatest benefit of the people of Elk Grove. The Chapter applies to new and rehabilitated landscaping for industrial, commercial, and institutional developments; to parks and other public recreational areas; to multi-family residential, common areas and model homes; and City road medians and corridors, recognizing that skillful planting and irrigation design, appropriate use of plants, and intelligent landscape management can assure landscape development that avoids excessive water demands and that is less vulnerable to periods of severe drought.

City of Elk Grove Floodplain Management Policy

The City's Floodplain Management Policy (Resolution No. 2001-48) (City of Elk Grove 2001) regulates floodplain management activities such as setting construction standards in flood prone areas and establishing permitting and floodplain mapping criteria as required for participation in the National Flood Insurance Program (NFIP). The purpose of this policy is to:

- Protect the life, health, and safety of the residents of the community;
- Protect buildings and property from damage due to flooding;
- Moderate the impact of new development on others;
- Minimize expenditure of public money for costly flood control projects;

- Minimize the need for rescue and relief efforts associated with flooding which are generally undertaken at the expense of the general public;
- Minimize prolonged business interruptions;
- Minimize damage to public facilities located in special flood and local flood hazard areas;
- Ensure that current flood hazard data is available for property owners, prospective buyers, insurance agents, real estate agents, and other interested parties;
- Ensure that those who develop in special flood or local flood hazard areas do so pursuant to the Floodplain Management Policy;
- Ensure that those who develop in special flood or local flood hazard areas assume responsibility for their actions;
- Preserve the natural characteristics and functions of watercourses and floodplains to moderate flood and drainage impacts, improve water quality, and preserve aquatic/riparian habitat; and
- Make federally subsidized flood insurance available to residents in the City by fulfilling the requirements of the National Flood Insurance Program (NFIP).

In addition to help reduce flood losses, the City implements the following:

- Restricts or prohibits development which is dangerous to health, safety, and property due to flood hazards;
- Controls the alteration of natural floodplains, stream channels, and natural protective barriers;
- Controls filling, grading, dredging, and other development which may increase flood damage; and
- Prevents or regulate the construction of flood barriers which will unnaturally divert floodwater or which may increase flood hazards in other areas.

Sacramento County Water Agency Urban Water Management Plan and Zone 40 Master Plan

Every urban water supplier that provides water to more than 3,000 customers or supplies more that 3,000 AF/yr is required to prepare and adopt an Urban Water Management Plan (UWMP) that describes the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The SCWA is responsible for developing the UWMP for Sacramento County. Additionally, the UWMP identifies and quantifies, to the extent practicable, the existing and planned sources of water available to the supplier and the reliability of the water supply and vulnerability to seasonal or climatic shortages. The Zone 40 Master Plan is prepared by the SCWA with the Water Forum Agreement as its foundation (see Figure 4.8-5). The Master Plan provides a flexible plan of water management alternatives, which can be implemented and revised as availability and feasibility of water supply sources change in the future. The current Zone 40 Master Plan (December 2002) reflects the changes from the 1987 Master Plan in the pattern of water demand growth, treatment for water quality, expansion of the original service area, and in the availability of potential sources of surface water supplies.

Water Forum Agreement

The Water Forum Agreement (WFA) was developed to assist the Sacramento region to meet its needs in a balanced way through implementation of seven elements. The elements include detailed understandings among stakeholders on how this region will deal with key issues, which include groundwater management practices, water diversions, dry year water usage, water conservation measures, and the protection of the Lower American River. The understandings were included in the Memorandum of Understanding for the Water Forum Agreement, which created the overall political and moral commitment to the WFA. The purpose of the Groundwater Management Element of the WFA is to protect the viability of groundwater resources for current and future uses. Through the creation of a publicly accountable governance structure, with respect to all groundwater users, the element requires the monitoring of total water withdrawn from the groundwater basin and the promotion of groundwater use in conjunction with surface water supplies to maximize the availability of both. To achieve the objectives of the WFA, the Groundwater Management Element addresses both conjunctive use and sustainable yield. Both the Elk Grove Water District and Sacramento County Water Agency are members of the WFA.

3.6.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The potential for exposure of persons or structures to inundation by seiche, tsunami, or mudflow was determined to be of no impact in the Initial Study prepared for this Project. Therefore these topics will not be discussed in this EIR. The reader is referred to the Initial Study for a discussion of these topics.

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on the environment associated with hydrology and water quality if it will:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion, siltation, run-off or flooding on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

IMPACTS AND MITIGATION

Impact 3.6-1: Implementation of the Project would not result water quality impacts associated with erosion, siltation, or pollution, including the potential to violate water quality standards or waste discharge requirements. (less than significant)

Implementation of the Project does not, in and of itself, construct new housing in the City. However, the Project does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Project would result in changing the General Plan land use designations and/or zoning of up to 42 opportunity sites in the City. Sites 2, 3, 4, 5, 6, 7A, C-12, C-13, C-14, C-18, C-19, C-20, C-25, C-33, C-34, C-36, and C-39 are designated to allow high density residential development and would allow multi-family uses under the adopted General Plan land use designations; the zoning changes associated with the Project would allow densities up to 30 dwelling units per acre on these sites. Sites C-1, C-2, C-6 through C-9, C-21 through C-24, C-26 through C-32, C-35, C-37, C-40, and C-41 would have the General Plan land use designation and zoning designation amended to allow high density residential uses at up to 30 dwelling units per acre. The Project would change allowed land uses on up to 353.5 acres in order to accommodate up to approximately 8,843 high density residential units.

Construction-Related Water Quality Impacts: Construction activities associated with development of the 42 opportunity sites could consist of grading and vegetation removal activities, which could increase soil erosion rates in the areas proposed for development. In addition, the compaction of soils by heavy equipment could reduce the infiltration capacity of the soils thereby increasing the runoff and erosion potential. If uncontrolled, the soil materials could result in engineering problems, blockage of drainage channels, and downstream sedimentation. Vegetation removal and earth-moving activities associated with construction may have the greatest potential for detrimental impacts to surface water quality and the removal of vegetation during construction could expose site soils to rainsplash, sheetflow and gullying erosion prior to successful revegetation. The cleared, exposed surfaces and soil stockpiles created during construction could create sedimentation in downstream waters. Fuels, lubricants, and other toxic materials used during construction could also potentially enter surface waters. As required by the Clean Water Act, each phase of construction requires an approved Stormwater Pollution Prevention Plan (SWPPP) that includes best management practices for grading, and preservation of topsoil. The

project proponent or contractor for each of the 42 opportunity sites is required to submit the SWPPP with a Notice of Intent to the Regional Water Quality Control Board (RWQCB) to obtain a General Permit. The RWQCB is an agency responsible for reviewing the SWPPP with the Notice of Intent, prior to issuance of a General Permit for the discharge of stormwater during construction activities.

Operational Water Quality Impacts: Development of future housing in the City, including the 42 opportunity sites, would result in new impervious areas associated with roadways, driveways, parking lots, buildings, and landscape areas. Normal activities in these developed areas include the use of various automotive petroleum products (i.e. oil, grease, fuel), household hazardous materials, heavy metals, pesticides, herbicides, fertilizers, and sediment. Within urban areas, these pollutants are generally called nonpoint source pollutants. The pollutant levels vary based on factors such as time between storm events, volume of storm event, type of uses, and density of people.

The General Plan has a number of policies and actions which assist in the protection of water quality during the construction phase of the Project. Policy CAQ-5 requires roads and structures to be designed, built, and landscaped to minimize erosion during and after construction. Policy CAQ-12 requires the City to seek to ensure that the quality of groundwater and surface water is protected to the extent possible. CAQ-12-Action 2 implements the City's NPDES permit on all public and private development projects and activities. Policy CAQ-13 requires that the City's NPDES permit be implemented through the review and approval of development projects and other activities regulated by the permit. Policy CAQ-18 requires that post–development peak storm water runoff discharge rates and velocities to be designed to prevent or reduce downstream erosion, and to protect stream habitat. Policy CAQ-19 encourages the retention of natural stream corridors and the creation of natural stream channels where improvements to drainage capacity are required. CAQ-19-Action 6 requires that all storm drainage improvements on natural streams be designed where feasible to maintain water flows necessary to protect and enhance existing fish habitat, native riparian vegetation, water quality, and/or ground water recharge. CO-19-Action 8 requires new development be designed to maximize the total floodplain frontage that is open to public view. Policy CAQ-20 restricts fill in any 100-year floodplain as delineated by currently effective FEMA Flood Insurance Rate Maps or subsequent comprehensive drainage plans unless specifically approved by the City and no fill is permitted in wetland areas unless approved by the City and appropriate state and federal agencies. Policy CAQ-21 requires a "stream buffer zone" along the stream for new development for Deer Creek, Elk Grove Creek, Laguna Creek and its tributaries, Morrison Creek, Strawberry Creek, and White House Creek. Policy CAQ-23 limits the uses in the stream corridors to recreation and agricultural uses compatible with resource protection and flood control measures and requires roads, parking, and associated fill slopes shall be located outside of the stream corridor, except at stream crossings. Policy CAQ-24 requires that existing open space lands within a stream corridor be retained as open space as a condition of development approval for projects that include a stream corridor. Unencumbered maintenance access to the stream shall be provided.

In addition to the General plan policies and actions discussed above, the City's Municipal Code Chapters 15.12, and 16.44, as well as Title 23 have been established to enforce the water quality regulations of the City. All housing developed as a result of implementation of the Project would

be subject to the provisions of the Elk Grove Municipal Code regulating water quality and riparian protection.

The policies in the Elk Grove General Plan and the various municipal codes described above are intended to assure that water quality is not compromised by the development of new housing units to meet the Housing Element goals. Consequently, impacts to water quality are considered **less than significant**.

Impact 3.6-2: Implementation of the Project would not significantly deplete groundwater supplies nor interfere substantially with groundwater recharge. (less than significant)

(Note: The following discussion is associated with potential impacts of the Project on groundwater as it relates to stormwater infiltration and groundwater recharge. Depletion of groundwater supplies as it relates to water usage is addressed in Section 3.12, Utilities.)

The Project would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge. Infiltration rates vary depending on the overlying soil types. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potentials; and impervious surfaces such as pavement significantly reduce infiltration capacity and increase surface water runoff.

Implementation of the Project does not, in and of itself, construct new housing in the City. However, the Project does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Project would result in changing the General Plan land use designations and/or zoning of up to 42 opportunity sites in the City. The Project would change allowed land uses on up to 353.5 acres in order to up to approximately 8,843 high density residential units. The increase in development density and intensity on these 42 opportunity sites result in impacts associated with groundwater depletion and recharge not discussed in previous General Plan environmental documents.

Recharge to the aquifer system in the Elk Grove area occurs from a combination of three main sources: stream recharge (primarily from the Cosumnes and Sacramento rivers), subsurface inflows from adjacent areas, and percolation of rainfall and applied water. A large area on both sides of the Cosumnes River, as well as, a small portion around the Sacramento River have areas with high to moderate recharge capabilities. The majority of the Elk Grove area has poor groundwater recharge capabilities as shown on Figure 3.6-2.

The Elk Grove Water District (EGWD) and the Sacramento County Water Agency (SCWA) pump groundwater from the South American Subbasin. The groundwater basins underlying the Sacramento County have been divided into three geographic subareas: (1) North Basin, (2) Central Basin, and (3) South Basin. EGWD overlies and extracts groundwater from the Central Basin from seven wells that range in total depth from 450 to 1,075 feet below ground surface. According to

the EGWD Urban Water Management Plan, the Central Basin is not adjudicated or considered to be *in a state of being* over drafted. Due to the active planning by water agencies, the basin is not foreseen to be over drafted in the future (EGWD, pg. 22).

Groundwater use is regularly monitored within the Sacramento County region. The Sacramento Groundwater Authority (SGA) Basin Management Report that was prepared in 2007-2008, found that groundwater use in the Central Basin, where EGWD is located, has remained relatively constant at approximately 262,500 AFY during the preceding four years and had a high of 264,860 in 2008. According to the other groundwater users from the basin (SCWA, the Golden State Water Company, and the California American Water Company), it is not anticipated that groundwater extraction would have increased in the years of 2009 or 2010, given the dramatic decline in home construction and the depressed local economy. This would indicate a remaining groundwater capacity of approximately 8,140 AFY in regards to the agreed upon sustainable yield of 273,000 AFY for the Central Basin stakeholders (EGWD, pg. 22).

The Elk Grove General Plan has policies and actions designed to protect groundwater recharge and reduce the potential for groundwater depletion. Policy CAQ-1 requires the reduction of the amount of water used by residential and non-residential uses by encouraging water conservation. CAQ-1-Action 1 requires implementation of Water Efficient Landscape Requirements Chapter 14.10. . This policy and action would reduce the amount of groundwater use thereby diminishing the potential for groundwater depletion. Policy CAQ-12 requires the City to seek to ensure that the quality of groundwater and surface water is protected to the extent possible. CAQ-12-Action 2 implements the City's NPDES permit on all public and private development projects and activities. This policy and action assist in the protection of groundwater quality. Policy CAQ-14 requires the City to minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and use on-site infiltration of runoff in areas with appropriate soils where the infiltration of storm water would not pose a potential threat to groundwater quality. This policy will assist in the protection of groundwater recharge by requiring a minimization of impervious surfaces.

Groundwater use by Elk Grove Water District and Sacramento County Water Agency, the water agencies serving the City, is in conformance with the pumping limits established by the WFA and is consistent with SGA *Groundwater Management Plan*. Groundwater pumping in the region is monitored by the SGA. Additionally, the City has a number of General Plan policies and actions designed to protect groundwater recharge and reduce the potential for groundwater depletion. For these reasons, the Project would not cause the depletion of groundwater supplies or interfere substantially with groundwater recharge. As such, implementation of the Project would have a **less than significant** impact regarding this issue.

Impact 3.6-3: Implementation of the Project would not alter the existing drainage pattern in a manner which would result in flooding and would not create or contribute runoff in excess of the capacity of stormwater drainage systems. (less than significant)

Implementation of the Project does not, in and of itself, construct new housing in the City. However, the Project does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the

Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Project would result in changing the General Plan land use designations and/or zoning of up to 42 opportunity sites in the City. The Project would change allowed land uses on up to 353.5 acres in order to accommodate up to approximately 8,843 high density residential units. The increase in development density and intensity on these 42 opportunity sites result in impacts associated with drainage not discussed in previous General Plan environmental documents.

The General Plan has a number of policies and actions which assist in the protection of the City against potential flood as a result of changing the existing drainage. Policy CAQ-13 requires that the City's NPDES permit be implemented through the review and approval of development projects and other activities regulated by the permit. Policy CAQ-14 requires the City to minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and use on-site infiltration of runoff in areas with appropriate soils where the infiltration of storm water would not pose a potential threat to groundwater quality. Policy CAQ-18 requires that post–development peak storm water runoff discharge rates and velocities shall be designed to prevent or reduce downstream erosion, and to protect stream habitat. Policy CAQ-19 encourages the retention of natural stream corridors and the creation of natural stream channels where improvements to drainage capacity are required. CAQ-19-Action 6 requires that all storm drainage improvements on natural streams be designed where feasible to maintain water flows necessary to protect and enhance existing fish habitat, native riparian vegetation, water quality, and/or ground water recharge. CO-19-Action 8 requires new development be designed to maximize the total floodplain frontage that is open to public view. Policy CAQ-20 restricts fill in any 100-year floodplain as delineated by currently effective FEMA Flood Insurance Rate Maps or subsequent comprehensive drainage plans unless specifically approved by the City and no fill is permitted in wetland areas unless approved by the City and appropriate state and federal agencies. Policy CAQ-21 requires a "stream buffer zone" along the stream for new development for Deer Creek, Elk Grove Creek, Laguna Creek and its tributaries, Morrison Creek, Strawberry Creek, and White House Creek. Policy CAQ-23 limits the uses in the stream corridors to recreation and agricultural uses compatible with resource protection and flood control measures and requires roads, parking, and associated fill slopes shall be located outside of the stream corridor, except at stream crossings. Policy CAQ-24 requires that existing open space lands within a stream corridor be retained as open space as a condition of development approval for projects that include a stream corridor. Unencumbered maintenance access to the stream shall be provided.

In addition to the General plan policies and actions discussed above, the City's Municipal Code Title 23 and Chapter 15.12 have requirements concerning drainage and watercourses for all development in the City. All housing developed as a result of implementation of the Project would be subject to the provisions of the Elk Grove Municipal Code regulating drainage and riparian protection.

The policies and actions in the Elk Grove General Plan and the various municipal codes describe above are intended to prevent flooding that could result from a change in the existing drainage

pattern from construction of new housing units developed to meet the Housing Element goals. Consequently, impacts to water quality are considered **less than significant**.

Impact 3.6-4 Implementation of the Project would not otherwise substantially degrade water quality. (less than significant)

Water Quality Impacts from Discharges to 303(d) Listed Water Bodies: Section 303(d) of the federal Clean Water Act (CWA) requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates *prioritization* and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

The 303(d) impaired waterbodies in Sacramento County are listed in Table 3.6-1. In addition to the waterbodies listed in Table 3.6-1, three lakes are listed as previously described. Under the CWA listing, these impaired water bodies have no remaining assimilative capacity or ability to accommodate additional quantities of these contaminants, irrespective of concentration. Projects are required to comply with requirements of approved TMDLs, as regulated in the region by the RWQCB through issuance of Waste Discharge Requirements and NPDES permit amendments.

As discussed under Impact 3.6-1, the City has a number of regulations and General Plan policies designed to protect water quality. Additionally, development in Elk Grove is subject to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins. As a result, implementation of the Project would have a **less than significant** impact.

Impact 3.6-5: Implementation of the Project would place housing or structures within a 100-year flood hazard area or would impede/redirect flows within a 100-year flood hazard area as mapped on a flood hazard delineation map. (less than significant)

As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Project would result in changing the General Plan land use designations and/or zoning of up to 42 opportunity sites in the City. The Project would change allowed land uses on up to 353.5 acres in order to accommodate up to approximately 8,843 high density residential units. The increase in development density and intensity on these 42 opportunity sites result in impacts associated with flooding not discussed in previous General Plan environmental documents.

As shown in Figure 3.6-3, portions of Site C-2 and Site C-41 are located within the 100 year Flood Zone as mapped on the FEMA Flood Insurance Rate Map. Portions of Sites C-1, C-9, C- 21, C-22, C-23, and C-40 are located in the 500-year Flood Zone. While these sites have been identified for Rural Residential, Low Density Residential, or Medium Density Residential *urban development as* part of the General Plan, development of these sites with High Density Residential uses would result in increased impervious surfaces. Increased site runoff could be generated in association with greater densities. As several of the sites are located within a floodplain, the increase in runoff could affect flooding both on and off-site.

The Elk Grove General Plan includes several policies and actions designed to reduce potential flooding impacts in the City. Policy SA-13 requires that all new projects not result in new or increased flooding impacts on adjoining parcels on upstream and downstream areas. Policy SA-14 requires the City to give priority to the designation of appropriate land uses in areas subject to flooding to reduce risks to life and property and states that the construction of new flood control projects shall have a lower priority, unless land use controls (such as limiting new development in flood-prone areas) is not sufficient to reduce hazards to life and property to acceptable levels. Policy SA-15 restricts the development on land subject to flooding during a 100- year storm event. Policy SA-16 requires that a buildable area outside the 100-year floodplain must be present on every residential lot sufficient to accommodate a residence and associated structures and that fill may be placed to create a buildable area only if approved by the City and in accordance with all other applicable policies and regulations. This policy also states that the use of fill in the 100-year floodplain to create a buildable area is strongly discouraged and shall be subject to review to determine potential impacts on wildlife, habitat, and flooding on other parcels. Policy SA-17 requires vehicular access to the buildable area of all parcels must be at or above the 10-year flood elevation. Policy SA-18 prohibits the creation of lots whose access will be inundated by flows resulting from a 10-year or greater storm but allows bridges or similar structures may be used to provide access over creeks or inundated areas, subject to applicable local, state, and federal regulations. Policy SA-19 discourages the number of creek crossings in order to reduce potential flooding and access problems. SA-19-Action 1 restricts lots which will contain two or more buildable areas on both sides of a creek or floodplain. Policy SA-20 prohibits parcels be created on which the presence of easements, floodplain, marsh or riparian habitat, or other features would leave insufficient land to build and operate structures. Policy SA-21 states the City's desire to support the construction of flood control projects. SA-21-Action 2 continues local efforts that encourage implementation of the Federal Flood Insurance Program. SA-21-Action 3 requires the City to participate with the City of Sacramento, the Army Corps of Engineers and other Federal, State and local governments and agencies to develop policies to finance, construct, and plan flood improvements to eliminate flooding in Elk Grove. Policy SA-23 requires all new urban development projects to incorporate runoff control measures to minimize peak flows of runoff and/or assist in financing or otherwise implementing Comprehensive Drainage Plans. SA-23-Action 1 ensures that runoff control measures are planned and provided as part of the review of development projects. Policy SA-24 requires that drainage facilities be properly maintained to ensure their proper operation during storms. The City's Floodplain Management Policy regulates floodplain management activities such as setting construction standards in flood prone areas and establishing permitting and floodplain mapping criteria as required for participation in the National Flood Insurance Program (NFIP). Title 23 of the Municipal Code also reduces the potential for flooding by establishing a stream protection zones for those projects which may impact streams.

As with all properties in the City, housing developed as a result of implementation of the Project would be subject to policies in the General Plan designed to protect persons and property from flooding. Additionally, all properties in the City are subject to the regulations and standards of the Elk Grove Municipal Code. Compliance with these policies, standards, and regulations reduce the potential for flooding impacts. As a result, implementation of the Project would have a **less than significant** impact regarding flooding.

Impact 3.6-6: Implementation of the Project would not expose people or structures to a *significant* risk of loss, injury or death involving flooding as a result of the failure of a dam. (less than significant)

As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Project would result in changing the General Plan land use designations and/or zoning of up to 42 opportunity sites in the City. The Project would change allowed land uses on 353.5 acres in order to accommodate up to approximately 8,843 high density residential units. The increase in development density and intensity on these 42 opportunity sites result in impacts associated with flooding as a result of dam failure not discussed in previous General Plan environmental documents.

As shown in Figure 3.6-4, the westernmost portion of the City lies within the Folsom and Nimbus Dam inundation area. Sites C-6, C-7, C-10, C-13, C-14, and C-26 through C-31 are all located within the dam inundation area of Folsom and Nimbus Dams.

Dam failure is generally a result of structural instability caused by improper design or construction, *instability resulting* from seismic shaking, or overtopping and erosion of the dam. Larger dams that are higher than 25 feet or with storage capacities over 50 acre-feet of water are *regulated by the* California Dam Safety Act, which is implemented by the California Department of Water Resources, Division of Safety of Dams (DSD). The DSD is responsible for inspecting and monitoring these dams. The Act also requires that dam owners submit to the California Office of Emergency Services inundation maps for dams that would cause significant loss of life or personal injury as a result of dam failure. The County Office of Emergency Services is responsible for developing and implementing a Dam Failure Plan that designates evacuation plans, the direction of floodwaters, and provides emergency information.

Regular inspection by DSD and maintenance by the dam owners ensure that the dams are kept in safe operating condition. As such, failure of these dams is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event. As a result, implementation of the Project would have a **less than significant** impact regarding flooding due to dam failure.

REFERENCES

California Water Quality Control Monitoring Council, CalEPA. 2012. *Which Lakes, Streams, or Ocean Locations Are Listed By The State As Impaired?* Available at: http://www.waterboards.ca.gov/mywaterquality/safe_to_eat/impaired_waters/. Accessed on June 25, 2013.

City of Elk Grove, 2003a. *City of Elk Grove General Plan.* Elk Grove, California. August 2003.

City of Elk Grove. 2003b. *City of Elk Grove General Plan, Volume 1: Draft Environmental Impact Report, SCH #: 2002062082.* Elk Grove, California. August 2003.

City of Elk Grove. 2003c. *Elk Grove General Plan Background Report.* Elk Grove, California. August 2003.

City of Elk Grove. 2006. *Sutter Elk Grove Master Plan Draft Environmental Impact Report.* Elk Grove, California. September 2008.

City of Elk Grove. 2011a. *Storm Drainage Master Plan, Volume II.* Elk Grove, CA. June 2011.

City of Elk Grove. 2011b. *Storm Drainage Master Plan Draft Environmental Impact Report, SCH#: 2011022035.* Elk Grove, CA. August, 2011.

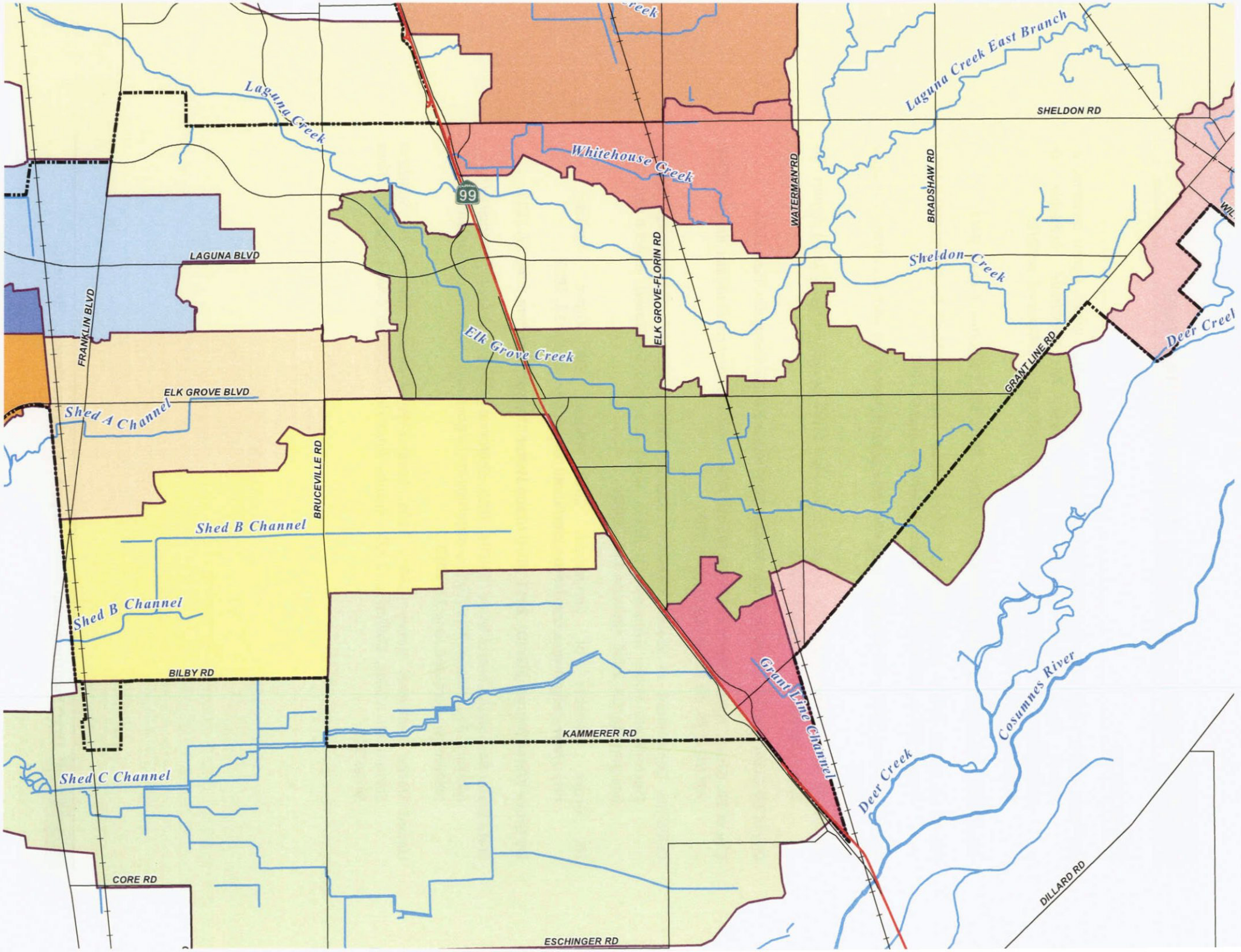
California Department of Water Resources (DWR). 2006. *California's Groundwater Update [Sacramento Valley Groundwater Basin, South American Sub-Basin],* Bulletin No. 118. Sacramento, CA. 2006. (Bulletin 118, 2006).

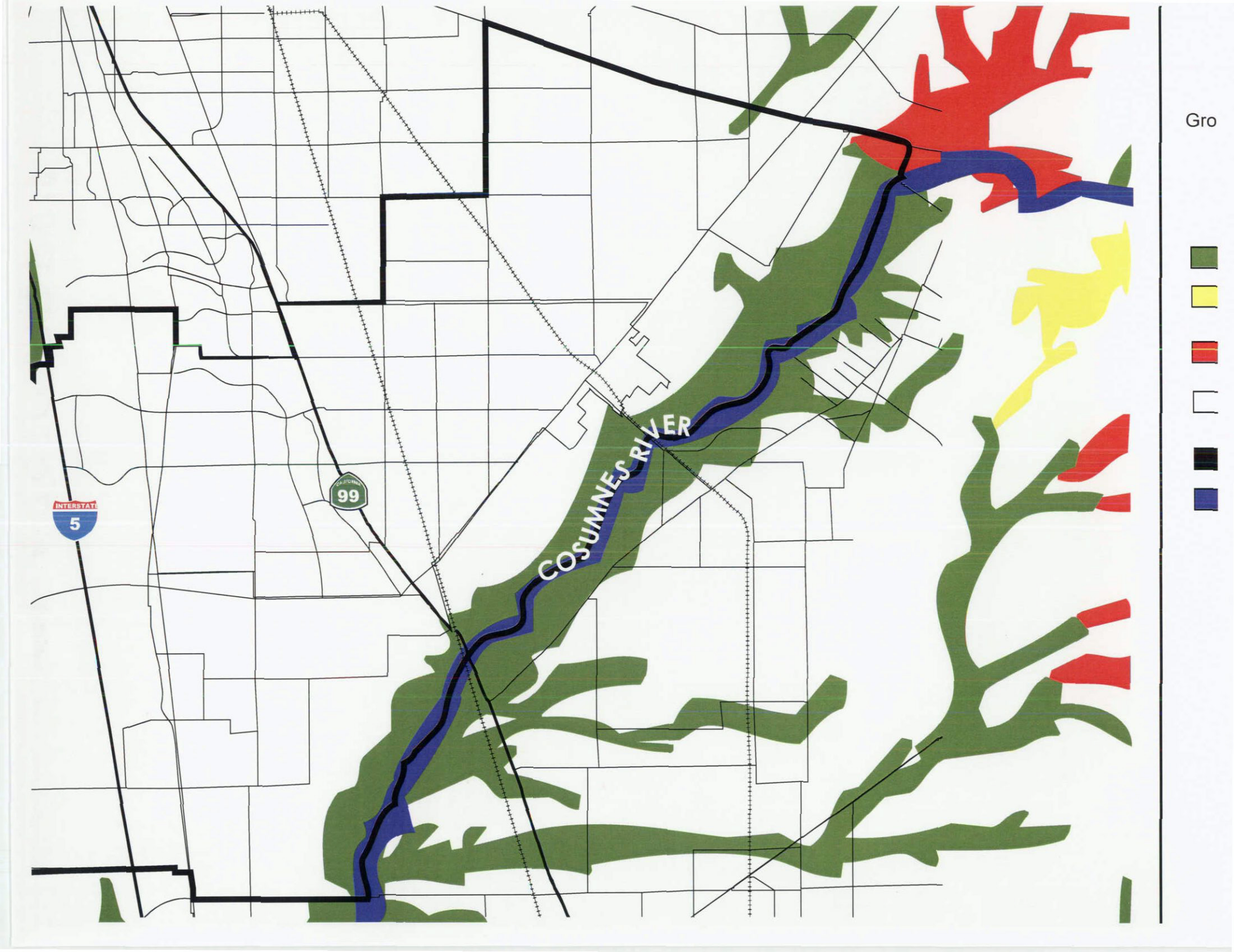
Elk Grove Chamber of Commerce. 2013. *About Elk Grove.* Available at: http://www.elkgroveca.com/secondary/about.asp. Accessed May 13, 2013.

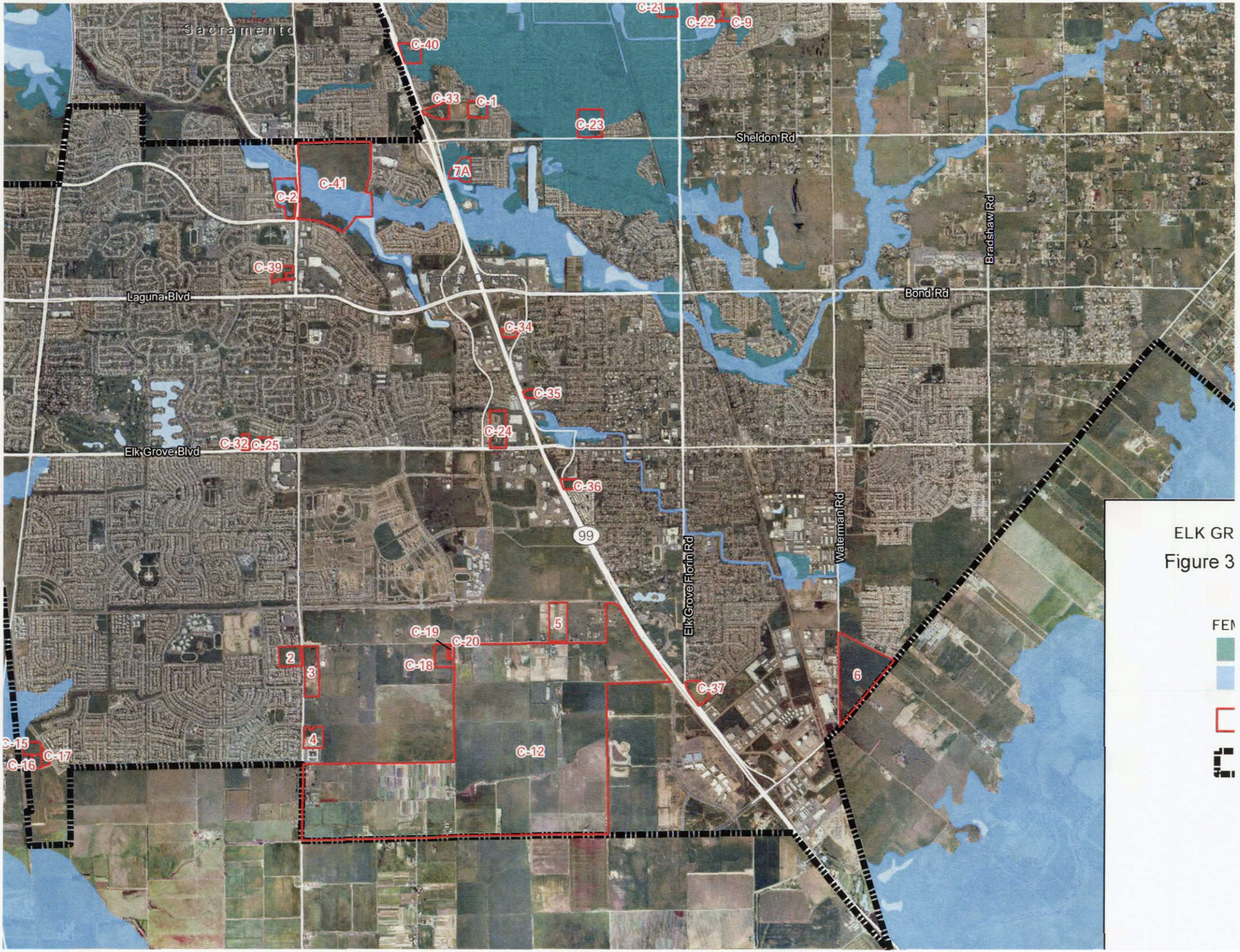
Elk Grove Water District (EGWD). 2011. *2010 Urban Water Management Plan.* June 22, 2011.

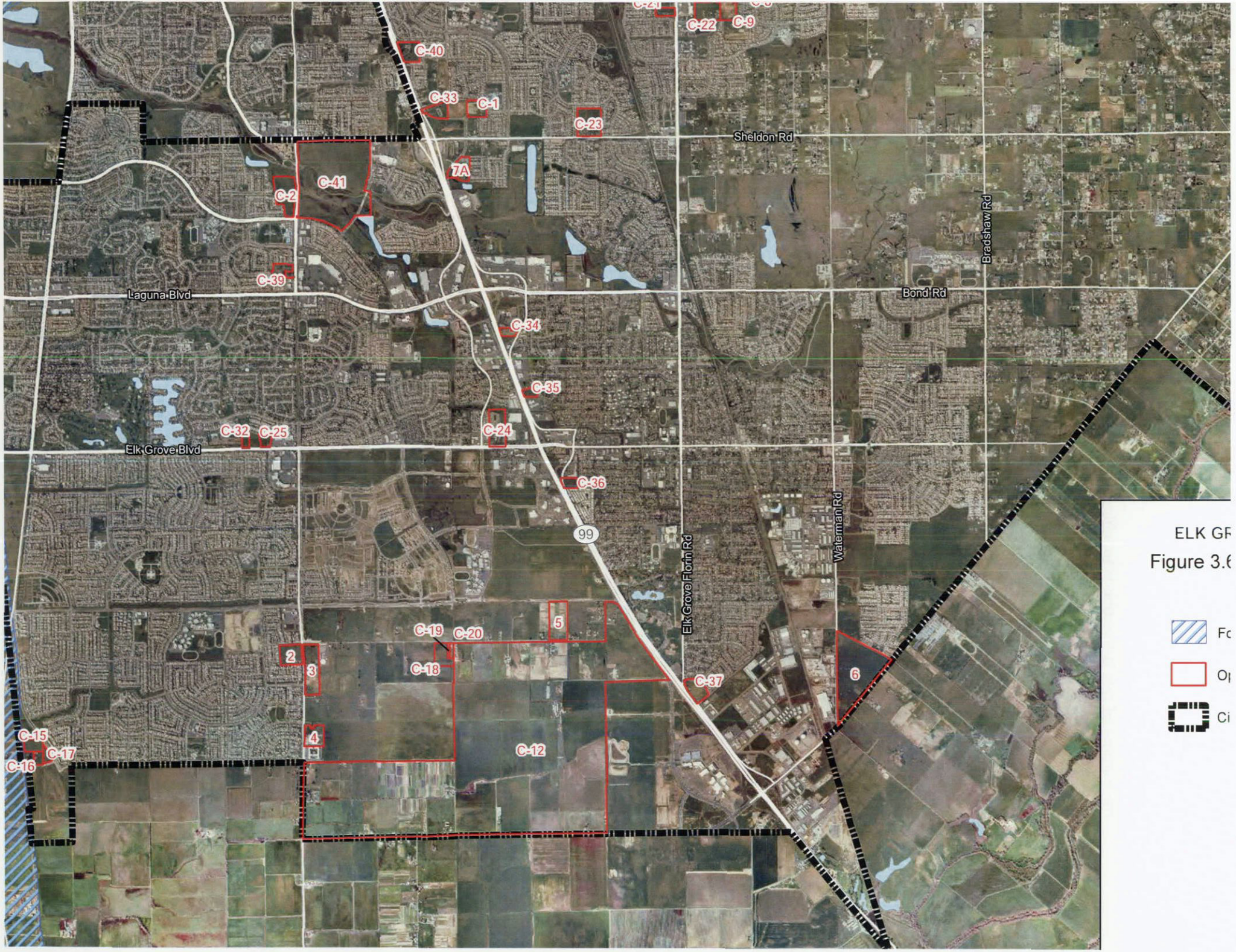
State Water Resources Control Board, CalEPA. 2012. *California Lakes and Reservoirs Impaired by Mercury.* Available at: http://www.waterboards.ca.gov/water_issues/programs/mercury/reservoirs/. Accessed June 23, 2013.

United Stated Geological Survey (USGS). 2005. *Ground-Water Quality Data in the Southern Sacramento Valley, California, 2005—Results from the California GAMA Program.* Data Series 285.


Laguna Creek
Whitehouse Creek
Laguna Creek East Branch
SHELDON RD
99
WATERMAN RD
BRADSHAW RD
LAGUNA BLVD
ELK GROVE-FLORIN RD
Sheldon Creek
FRANKLIN BLVD
Elk Grove Creek
GRANT LINE RD
ELK GROVE BLVD
Shed A Channel
BRUCEVILLE RD
Shed B Channel
Shed B Channel
BILBY RD
Grant Line Channel
Cosumnes River
KAMMERER RD
Deer Creek
Shed C Channel
CORE RD
DILLARD RD
ESCHINGER RD


COSUMNES RIVER
INTERSTATE
5
CALIFORNIA
99
Gro


Sacramento
C-21
C-22
C-9
C-40
C-33
C-1
C-23
Sheldon Rd
7A
C-41
C-2
Bradshaw Rd
C-39
Rancho Cordova
Laguna Blvd
Bond Rd
C-34
C-35
C-24
C-32
C-25
Elk Grove Blvd
C-36
99
Waterman Rd
Elk Grove Florin Rd
5
C-19
C-20
2
3
C-18
6
C-37
4
C-15
C-16
C-17
C-12
ELK GR
Figure 3
FEM


C-40
C-33
C-1
C-23
C-22
C-9
Sheldon Rd
7A
C-41
C-2
C-39
Laguna Blvd
Bradshaw Rd
Bond Rd
C-34
C-35
C-32
C-25
C-24
Elk Grove Blvd
C-36
99
Elk Grove Florin Rd
Waterman Rd
5
C-19
C-20
2
3
C-18
C-37
6
C-15
C-17
C-16
4
C-12
ELK GR
Figure 3.6
Fo
Op
Ci

The purpose of this EIR section is to address the consistency of the Project with applicable local land use and planning regulations and policies adopted to address environmental effects. This chapter identifies the existing land use conditions and the surrounding areas and analyze the Project's consistency with relevant planning documents and policies adopted for the purpose of avoiding or mitigating an environmental effect. General Plan policies associated with other specific environmental topics (air quality, biological resources, greenhouse gas, hazards, hydrology/water quality, noise, public services/recreation, transportation, and utilities) are discussed in the relevant sections of this EIR.

Information in this section is based on information provided by the City of Elk Grove, including the *Draft Housing Element (*City of Elk Grove 2013), site visits conducted by De Novo Planning Group in 2012, ground and aerial photographs, and the following reference documents: *City of Elk Grove General Plan* (City of Elk Grove 2003a), the *City of Elk Grove General Plan Environmental Impact Report* (General Plan EIR) (City of Elk Grove 2003b), and the *City of Elk Grove Municipal Code, Title 23 Zoning Code* (City of Elk Grove 2011).

3.7.1 ENVIRONMENTAL SETTING

EXISTING CONDITIONS

The City of Elk Grove encompasses approximately 26,980 acres in southern Sacramento County. Existing land uses in the City are predominately single-family residential, which is generally distributed throughout the developed areas of the City. Other land uses include multi-family, commercial, office, recreational, and public uses. Rural and open space land includes annual grassland pasture, oak woodland, and riparian vegetation. Riparian vegetation is found in the Stone Lakes National Wildlife Refuge and along the Cosumnes River, the Sacramento River and associated tributaries (e.g., Elk Grove Creek, Deer Creek, Laguna Creek, Morrison Creek, and Whitehouse Creek).

As described in Chapter 2.0, the Project would update the adequate sites to accommodate the City's 2013-2021 RHNA. The City has a shortfall of sites to accommodate its very low and low income needs, so the City will amend the General Plan land use designations and/or zoning designations on up to 42 sites as shown on Table 2.0-1 in order to accommodate the City's share of regional housing needs.

Housing Opportunity Sites

The Project identifies land use changes to up to 42 sites to accommodate housing growth. Table 3.7-1 identifies these opportunity sites, their existing General Plan designation, zoning district, existing land uses, and entitlement status.

TABLE 3.7-1: HOUSING OPPORTUNITY SITES – EXISTING LAND USE AND ZONING DESIGNATIONS, LAND USES, AND ENTITLEMENT STATUS

Map ID	Acreage	Location	General Plan Land Use Designa-tion	Zoning District	Existing Land Use	Entitlement Status
2	12.4	East Franklin at SW corner of Quail Run Lane/Poppy Ridge Road and Bruceville Road	HDR	RD-20	Mostly undeveloped agricultural land, single family residence and accessory structures	None
3	14	Laguna Ridge, SE corner of Poppy Ridge Road and Bruceville Road	HDR	RD-20	Agricultural land	None
4	9.6	Laguna Ridge, Bruceville Road just north of Bilby Road, just north of Seasons	HDR	RD-15	Mostly undeveloped land, with a single family residence and accessory structures	None
5	11.5	Laguna Ridge, between Whitelock Parkway and Poppy Ridge, next to future community park site	HDR	RD-20	Mostly undeveloped, rural residences	None
6	15	Waterman and Grant Line Road	HDR	RD-20	Undeveloped, high voltage power lines	Tentative map approved; no design review
7A	8.7[1]	East Stockton just south of Sheldon	C/O/MF	SC(MF)	Undeveloped	None
C-1	8.7	East Stockton Blvd just north of Sheldon Road	MDR	SPAC99	Undeveloped	None
C-2	6.5[2]	NW corner of Big Horn and Bruceville Road	RR	SPALCF	Undeveloped	None
C-6	7.0	Laguna West Town Center	C	LC	Undeveloped	None
C-7	5.6	Laguna West Town Center	LI	MP	Undeveloped	None
C-8	6.3	Calvine Road east of Elk Grove Florin Road	LDR	RD-7	Under development	Approved Tentative Map and Design Review
C-9	8.0	Brown Road, south of Calvine Road near Elk Grove Florin Road	LDR	RD-5	Undeveloped	Approved tentative map

Map ID	Acreage	Location	General Plan Land Use Designation	Zoning District	*Existing Land Use*	Entitlement Status
C-10	7.5	Stonelake, West Taron at Riparian	C	LC	Undeveloped	None
C-12	50.0	Southeast Policy Area[3]	SEPA	AG-20		In process, consistent
C-13	3.9	Laguna West Town Center	HDR	RD-25	Undeveloped	None
C-14	3.9	Laguna West Town Center	HDR	RD-25	Undeveloped	None
C-15	3.0	Willard Parkway at Bilby Road	ER	AG-80	Undeveloped	None
C-16	3.4		ER	AG-80	Single family residence and accessory structures	None
C-17	2.7		ER	AG-80	Undeveloped	None
C-18	9.5	Laguna Ridge, SW corner of Poppy Ridge and Big Horn	HDR	AG-20	Undeveloped	None
C-19	0.9		HDR	AG-20	Undeveloped	None
C-20	1.6		HDR	AG-20	Single family residence	None
C-21	4.4	Elk Grove Florin Road just south of Calvine	LDR	AR-5	Single family residence and accessory structures	Prior application withdrawn
C-22	12.6	Brown Road, south of Calvine Road near Elk Grove Florin Road	LDR	AR-5	Three single family residences and accessory structures	None
C-23	18.2	Sheldon Road at Vytina Drive	LDR	AR-5	Rural residential uses	None
C-24	16.3	Elk Grove Boulevard near Laguna Springs Drive (Capital Nursery site)	C	SPALCF/ AR-10	Commercial buildings and accessory structures – former Capital Nursery	None (recently vacant)
C-25	3.4	Elk Grove Boulevard at Backer Ranch (next to Nugget)	HDR	RD-20	Undeveloped	*Application in* process, consistent
C-26	5.2	Stonelake, West Taron at Elk Grove Boulevard	C	LC	Undeveloped	Approval expired
C-27	9.4	Maritime, just west of Harbor Point	LI	MP	Undeveloped	None
C-28	2.6	Laguna West Town Center	C	LC	Undeveloped	Approval expired
C-29	2.0	Laguna West Town Center	C	LC	Undeveloped	None
C-30	2.9	Laguna West Town Center	C	LC	Undeveloped	None

Map ID	Acreage	Location	General Plan Land Use Designation	Zoning District	Existing Land Use	Entitlement Status
C-31	3.0	Harbour Point at Maritime	C	TC	Undeveloped	None
C-32	3.2	Elk Grove Boulevard, just west of Carlton Plaza	LDR	AR-2	Undeveloped	None
C-33	9.8	East Stockton Boulevard at Bow Street	HDR	RD-20	Single family residential use, agricultural and accessory buildings	None
C-34	8.1	East Stockton Boulevard south of Bond Road, just north of Premier West Bank	HDR	RD-20	Undeveloped	None
C-35	3.7	East Stockton Boulevard at Banff Vista Drive	C	AC	Parking area, remainder is undeveloped	None
C-36	3.0	East Stockton Boulevard just south of Elk Grove Boulevard	C/O/MF	LC	Undeveloped	None
C-37	4.3	East Stockton Boulevard at Hampton Oak Drive	C	SC	Undeveloped	Approved tentative map and CUP
C-39	6.4	Laguna Boulevard and Bruceville Road	C/O/MF	SC		Approved Tentative Map and Design Review
C-40	10.3	East Stockton Boulevard south of Calvine	LDR	SPAC99	Mostly undeveloped, with abandoned utility poles and driveway associated with previous use	Approved tentative map (invalid)
C-41	15.0[4]	Sheldon/Bruceville /Big Horn/Lewis Stein	RR	SPALCF	Undeveloped	None

Notes:
1 9.7 acre site. Only 8.7 acres buildable due to reservation of 1 acre for drainage.
[2] 18 acre site. Only 6.5 acres assumed to be buildable due to floodplain.
[3] It is anticipated that the Southeast Policy Area will be adopted after the Housing Element. Therefore, the Housing Element includes a program requiring these units in the final plan for the Southeast Area.
[4] Total site is 150± acres. 15 acres are identified for HDR in existing General Plan policy LU-40.

3.7.2 REGULATORY SETTING

Local

Elk Grove General Plan

The Elk Grove General Plan represents the community's goals and aspirations for its long-term physical form and development. The General Plan is a broad framework for planning the future of the City of Elk Grove. It is the official policy statement of the City Council to guide the private and public development of the City in a manner to gain the maximum social and economic benefit to the citizens (General Plan, p. 5-6).

General plans are prepared under a mandate from the State of California, which requires each city and county to prepare and adopt a comprehensive, long-term general plan for its jurisdiction and any adjacent related lands. Under State law, City ordinances regulating land use must be consistent with the General Plan. The Zoning Code, Specific Plans, and individual project proposals must be consistent with the goals, policies, and standards contained in the General Plan. In addition, all capital improvements and public works projects must be consistent with the General Plan (General Plan, p. 6

GENERAL PLAN LAND USE MAP

The Land Use Policy Map describes what type of urban land uses are desired—or whether existing open lands will be retained for open space or other uses. In some areas, the Land Use Policy Map shows future uses, which differ from the existing land uses; in these areas, the General Plan foresees change and a transition to new land uses (General Plan, p. 129). The Land Use Map portrays the ultimate uses of land in Elk Grove through land use designations. The existing Land Use Map designations for the 42 opportunity sites are identified in Table 3.7-1 and are depicted in Figure 2.0-3 of the Project Description. Each of the land use designations are described below.

Rural Residential (RR): Minimum lot size: 2 to 10 acres (0.1 - 0.5 du/gross acre)

Estate Residential (RR): Lot sizes range from ¼ acre to 2 acres. (0.51 – 4.0 du/gross acre)

Low Density Residential (LDR): Lot sizes vary, generally from approximately 6,000 to 10,000 SF. (4.1 - 7.0 du/gross acre)

Medium Density Residential (MDR): May include small lot single family development or condo/townhome type development. (7.1-15 du/gross acre)

High Density Residential (HDR): May consist of apartments, condominiums, or clustered single family. (15.1-30 du/gross acre)

Commercial/Office/Multi-Family (C/O/MF): Generally characterized by office, professional, and retail uses in any mix. Also includes high density residential development. Multifamily allowed at a maximum density of 20 units per gross acre.

Commercial (C): Generally characterized by office, professional, and retail uses in any mix. Residential uses are not permitted.

Limited Industrial (LI): Generally characterized by industrial or manufacturing activities, which occur entirely within an enclosed building.

Southeast Policy Area (SEPA): Land use planning for the Southeast Policy Area is guided by Policy LU-32 which requires development in this area to: 1) be guided by a detailed designation of land uses, master plan for infrastructure, and architectural standards, or 2) to meet specific project size and benefit criteria established by Policy LU-32.

GENERAL PLAN POLICIES

City of Elk Grove General Plan policies and standards applicable to environmental issues associated with land use are summarized below. General Plan policies associated with specific environmental topics (air quality, biological resources, greenhouse gas, hazards, hydrology/water quality, noise, public services, recreation, transportation, and utilities) are discussed in the relevant chapters of this EIR.

Policy LU-3 The Zoning Map and all other land use approvals, including Specific Plans and Special Planning Areas, shall be consistent with the Land Use Policy Map of this General Plan.

Policy LU-4 All land use approvals, including, but not limited to: Zoning, Planning documents (such as Specific Plans and Special Planning Areas), Tentative Maps, Conditional Use Permits, Etc., shall be required to conform with the General Plan.

Policy LU-6 Multi-family housing development in excess of 15 dwelling units per gross acre should be located according to the following general criteria. Flexibility may be applied on a case-by-case basis for sites, which vary from these guidelines.

- Multi-family housing sites should generally be no smaller than eight (8) acres and no larger than fifteen (15) acres. *The minimum size is intended to ensure on-site management; the maximum size is intended to reduce the potential for public safety problems.*
- Individual sites should be located at least one-third (1/3) mile apart. *This is intended to reduce the potential for over-concentration of multi-family uses in any part of Elk Grove.*
- Multi-family housing sites should be located close to commercial areas, major roadways, and public transit to encourage pedestrian rather than vehicle traffic.
- Senior/assisted living housing projects may be appropriate at sizes and spacing below typical thresholds, due to the reduced traffic and other impacts generally associated with these uses.

Policy LU-25 The East Franklin Specific Plan shall designate a minimum of 64 net acres of land for development of high-density residential development.

Policy LU-29 At least four percent (4%) of the total land area within the Laguna Ridge Policy Area shall be designated for high-density residential development.

Policy LU-32

- Development in the Southeast Policy Area shall not occur, and no land use entitlements shall be granted, until a master plan has been prepared and approved by the City.
- The master plan shall, at a minimum, include the following specific components:
  - Detailed designation of land uses;
  - A maser plan for key backbone infrastructure (e.g., water, sewer, drainage, roads);
  - Architectural standards, development regulations, or other planning that describes the form and function of new development; and
  - Other components as directed by the City Council as being necessary for the proper and comprehensive planning of the policy area.
- The City Council may, at its discretion, waive the requirement of preparation of a master plan of the Southeast Policy Area prior to the approval of a land use entitlement when, at the determination of the City Council after a recommendation by the Planning Commission, the project meets the following criteria:
  - The project is a minimum of 75 acres in size; and
  - The project is located in an area of the Southeast Policy Area that will allow for the orderly and strategic extension of utilities and infrastructure to serve the development; and
  - The project:
    - Will improve the jobs-housing balance of the city and/or stimulate job creation and retention; and/or
    - *Is of city-wide significance,* providing a needed or desired amenity, feature, or other aspect as determined by the City' and
  - Approval of the project will not inhibit future master planning efforts.

Policy LU-40 Between 10 and 15 acres (net) within APN 116-0012-047, -050, and -059 located on the south side of Sheldon Road, east of Bruceville Road, and north of Big Horn Boulevard shall be designated high density residential development.

Policy CAQ-7 Encourage development clustering where clustering would facilitate on-site protection of woodlands, grasslands, wetlands, stream corridors, scenic areas, or other appropriate natural features as open space, provided that:

1. Urban infrastructure capacity is available for urban use.
2. On-site resource protection is appropriate and consistent with other General Plan Policies.
3. The architecture and scale of development is appropriate for the area.

4. Development rights for the open space area are permanently dedicated and appropriate long-term management is provided for by either a public agency, homeowners association, or other appropriate entity.

Zoning Code

Title 23, Zoning, of the City of Elk Grove Municipal Code carries out the policies of the Elk Grove General Plan by classifying and regulating the uses and development of land and structures within the City, consistent with the General Plan. The Zoning Code is adopted to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the City [Ord. 8-2011 §3(B), eff. 6-24-2011].

ZONING DISTRICTS

Table 2 of Title 23 identifies the zoning districts which correspond to and implement the land use categories for the Project sites and surrounding areas. Following is a general description of each of the zoning district categories, along with unique characteristics of each corresponding zone district (Title 23, Zoning).

Agricultural (AG-20 -80). The AG districts are applied to areas of the City for viable agricultural use and very low density residential use. The agricultural zoning districts allow for a wide range of agricultural uses on large parcels of land. These uses may include crop production, commercial riding academies and stables, animal keeping, agricultural labor housing, and compatible accessory uses. The zoning district number associated with the AG districts corresponds to the minimum lot size in such district.

- *AG-20.* The AG-20 zone is applied to areas of the City to accommodate agricultural use on parcels a minimum of 20 gross acres in size.

- *AG-80.* The AG-80 zone is applied to areas of the City to accommodate a wide range of agricultural uses on parcels of land a minimum of 80 gross acres in size.

Agricultural Residential (AR). The AR districts implement the estate residential and rural residential General Plan land use designation.

- *AR-2.* The AR-2 district allows for one residential unit on lots with a minimum size of two gross acres and is intended to accommodate low density single-family residential uses in a rural setting with agricultural and accessory uses. Implements the estate residential General Plan designation.

- *AR-5.* The AR-5 zoning district allows for one residential unit on lots with a minimum size of five gross acres to accommodate low density single-family development along with agricultural and accessory uses. Implements the rural residential General Plan designation.

Low Density Residential (RD-4 through RD-7). The low density residential zoning district designations are applied to areas of the city intended to accommodate low density single-family residential neighborhoods. Permitted uses in the RD districts include single-family and two-family homes, second units, and compatible neighborhood support facilities. Property with this designation should be located near other residential properties, schools, parks/open space, and neighborhood commercial services with low-impact office and light industrial uses nearby.

- *RD-5.* The RD-5 district allows single-family and two-family homes up to a maximum density of five dwelling units per acre. This district may include detached and attached housing types, with typical development one and two stories in height with private yard areas.

- *RD-7.* The RD-7 district allows single-family and two-family homes up to a maximum density of seven dwelling units per acre. This district may include detached and attached housing types, as well as cluster developments. Building heights in this district are typically one and two stories. Development standards allow for a variety of housing types.

***Medium Density Residential* (RD-10 and RD-15).** The medium density residential zoning district designations are applied to areas of the City intended to accommodate higher density single-family and lower density multifamily residential neighborhoods. These RD districts accommodate a variety of housing types with a density range between 7.1 and 15 dwelling units per acre. Specifically, medium density residential development may include detached and attached single-family homes, duplexes, townhomes, condominiums, row houses, and garden apartments. Development standards for these districts allow significant design flexibility to encourage a broad range of housing types and are intended to ensure compatibility and connectivity with surrounding neighborhoods and uses.

- *RD-15.* The RD-15 district may include single-family, two-family, and/or multifamily residential use within a maximum density of 15 dwelling units per acre. Development may include both for-sale and for-lease products, such as small-lot single-family attached or detached homes, townhomes, condominiums, row houses, and garden apartments. Residential structures are typically one and two stories in height (three stories in some cases) with greater lot coverage than the low density single-family residential districts. The RD-15 district should serve as a transitional residential district between lower density single-family neighborhoods and high density residential districts, office buildings, commercial uses, or light industrial uses. RD-15 sites should be located near arterial or collector roads.

High Density Residential (RD-20 through RD-30). The high density residential zoning district designations are applied to areas of the City intended to accommodate higher density multifamily development such as apartments and condominiums. This designation may also include high density single-family development types such as townhomes and other attached housing types. High density detached homes may be considered in the RD-20 designation. Residential densities shall be in the range of 15.1 to 30 dwelling units per acre. Property with this designation should be located near other multifamily sites, office, commercial uses, or light industrial areas. Additionally, multifamily residential sites should be located *along thoroughfare, arterial, or collector roads or* near existing or planned public transit stops. Standards for these districts promote attractive residential development that is compatible with surrounding neighborhoods, while at the same time carefully regulating uses to assure compatible development that limit impacts on surrounding uses.

- *RD-20.* The RD-20 district is intended for high density attached single-family homes, such as townhomes or row houses, as well as medium density multifamily development that includes apartments and condominiums up to a maximum density of 20 dwelling units per acre. *Detached single-family homes may be considered on a case-by-case basis with a*

conditional use permit request. Development is typically two stories in height (three stories in some cases) with greater lot coverage than the medium density residential districts.

- *RD-25.* The RD-25 district is intended for high density residential development, including apartments and condominiums or higher density attached single-family units, such as townhomes. The maximum density in this district is 25 dwelling units per acre and it is expected that most developments will be two to three stories in height with greater lot coverage than in the RD-20 district.

Office. The office zoning districts implement the land use policies and land use designations for office development contained in the General Plan. Each of the office zoning districts allows for a specific range of uses along with associated development standards. The two (2) office zoning districts are designed to preserve areas for traditional business and professional office development as well as supportive retail, restaurant, and service uses. While the development standards associated with the office zoning districts are intended to enhance employment opportunities and the overall economic vitality of Elk Grove, these regulations are also designed to promote attractive development and ensure minimal impacts on surrounding development.

- *Industrial-Office Park (MP).* The industrial-office park district is intended to provide well-designed and integrated development that supports a range of clean, light industrial or high-technology office and manufacturing uses and may include research, retail, service, and storage components or other supportive uses, such as dry cleaners, day care centers, restaurants or medical clinics. The MP designation is intended for low to medium intensity uses located along freeways, thoroughfares, arterials, or collectors or near existing/planned public transit stops. The emphasis in this district is on development in a business park setting on sites adjacent to other industrial, commercial, or office uses or near higher density residential development. Development should be pedestrian-friendly with connections between and among different uses; however, it should also be auto-accommodating. Development in this district should take advantage of existing or planned public transit opportunities.

Commercial. The commercial zoning districts implement the land use policies as well as the commercial office and mixed-use land use designations contained in the General Plan. Each of the commercial zoning districts allows for a specific range of commercial activities as well as a range of development intensity. Some of these districts support neighborhood-oriented commercial activities while others support commercial uses serving a local or regional market area.

- *Shopping Center (SC).* The shopping center district is intended for medium to high intensity shopping centers with a local or regional market area on medium to large sites at major intersections. The SC zone should be adjacent to higher density residential development. Development in this district typically involves integrated structures with multiple uses and tenants providing a broad range of goods and services. Development should incorporate pedestrian-friendly designs that include walkways interior to the project as well as connections to adjacent uses and neighborhoods, but should also be auto-accommodating.

- *Limited Commercial (LC).* The limited commercial district is designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods. The limited commercial district may also be located along arterial or collector roads at midblock locations between major intersections. This district is intended to promote a mix of retail goods and services as well as small-scale office uses and low intensity mixed-use development. Limited commercial properties should be smaller in size, developed with buildings that are compatible in scale with surrounding residential neighborhoods. Development should be pedestrian-friendly with entrances and windows oriented to the sidewalk/street.

- *Highway Travel Commercial (TC).* Development in the highway travel commercial district is expected to be grouped near Interstate 5 or State Highway 99. Uses in this district should be designed to serve primarily City residents but also people from around the region. Uses in the TC zone should be destination places that attract users with their rich mix of uses and activities. Potential uses within the zone may include performing arts centers, sports facilities, restaurants, hotels, and other entertainment venues. These uses benefit from proximity to freeway interchanges to accommodate higher traffic volumes associated with "destination" places.

- *Auto Commercial (AC).* The auto commercial district is characterized by automotive sales and services and related uses. This zone is intended to promote the unified grouping of auto-oriented uses in locations where they will be convenient to residents and visitors alike. The designation should be used on sites adjacent to other existing commercial or office uses and should be located near freeways, thoroughfares, and arterials. Uses should be of medium intensity and should be auto-accommodating.

Special Planning Area (SPA). The purpose of the special planning area (SPA) district is to designate areas for unique and imaginative planning standards and regulations not provided through the application of standard zoning districts. Allowed uses and development standards within the special planning area are those uses and standards listed uses in the adopted special planning area. The enabling legislation granting authority to prepare, process, adopt and implement a Special Planning Area (SPA) is defined by Title 23, Chapter 16,(23.16.100) of the City of Elk Grove Municipal Code (Title 23, Zoning). The intent of the SPA is to allow flexibility from the development standards and existing zoning. The SPAs are intended to promote housing development through the easing of these standards (Elk Grove 2003a, pg. 119). Housing opportunity sites are identified in two of the SPAs: Laguna Community/Floodplain SPA (78-SPA-20) and Calvine Road/Highway 99 SPA (SPA 5-8-2, Ordinance No. SZC 99-0038).

Multifamily Overlay District (MF). The purpose of the multifamily overlay zone is to implement the General Plan by establishing opportunities for multifamily housing in specified locations throughout the City. This overlay zone supplements the allowed uses and development standards of the underlying zoning district. The intent is to allow multifamily development in conjunction with or exclusive of nonresidential uses permitted in the underlying zoning district to which it is applied.

Design Review

Design review is required for multifamily development. See Section 3.1, Aesthetics, for a discussion of the design review process and the Elk Grove Design Guidelines.

Laguna Ridge Specific Plan

The Laguna Ridge Specific Plan (LRSP) encompasses approximately 1,900 acres and is located in the southwestern portion of the City, west of Highway 99, south of Elk Grove Boulevard, east of Bruceville Road and the East Franklin Specific Plan area, and north of Bilby Road and the Southeast Policy Area. The LRSP proposes 7,767 dwelling units, and approximately 265 acres of commercial, office and civic uses, which will allow for approximately 330 thousand square feet of space at typical densities. The LRSP establishes standards to regulate development, including standards for land use, infrastructure, and resource management. Sites 3, 4, 5, C-18, C-19, and C-20 are located in the LRSP.

East Franklin Specific Plan

The East Franklin Specific Plan (EFSP) encompasses approximately 2,474 acres and is located in the southwestern area of the City, south of Elk Grove Boulevard, east of Franklin Boulevard and the Union Pacific Railroad Tracks, west of Bruceville Road, and Bilby Road on the south, except for a small portion that extends south of Bilby Road. The EFSP provides for 10,103 dwelling units, a commercial center, schools, parks and open space, and supporting infrastructure. The EFSP establishes standards for residential and commercial development, infrastructure improvements, natural resource preservation, wetland mitigation, and agricultural land mitigation. Sites C-15, C-16, and C-17 are located in the EFSP.

East Elk Grove Specific Plan

The East Elk Grove Specific Plan (EEGSP) encompasses approximately 1,440 acres and is located in the southeastern area of the City, south of Bond Boulevard, east of Waterman Road, west of Waterman Road, and north of Grant Line Road. The EEGSP provides for 4,300 dwelling units, commercial and industrial land uses, schools, parks, open space, and supporting infrastructure. The EEGSP establishes standards for residential and commercial development, infrastructure improvements, natural resource preservation, wetland mitigation, and tree mitigation. Sites 6 is located in the EEGSP.

3.7.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on land use and planning if it will conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

The NOP identified that the Project would not result in impacts associated with the physical division of existing communities because the opportunity sites are vacant, underdeveloped, and/or infill sites and the Project does not include any barriers or dividing features, such as wide roadways (see Appendix A). The NOP also identified that the Project would not conflict with an adopted habitat conservation plan or natural community conservation plan (see Appendix A). Therefore, these issues are not addressed further.

IMPACTS AND MITIGATION MEASURES

Impact 3.7-1: Implementation of the proposed Housing Element may conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted to avoid or mitigate an environmental effect. (Less than Significant)

CONSISTENCY WITH THE GENERAL PLAN

As set forth by state law, the General Plan serves as the primary planning document for the City and all subordinate documents and plans are required to be consistent with the General Plan. The City's General Plan Policies LU-3 and LU-4 further reinforce state law in that they require zoning, land use approvals and Specific Plans, Special Planning Areas, Tentative Maps, Conditional Use Permits, Etc., to conform to the General Plan.

The Project would update the Housing Element of the General Plan, amend the General Plan land use map, and revise the Zoning Code, as described in Chapter 2.0. The Housing Element identifies the City's approach to accommodating its housing needs. The majority of Elk Grove's housing needs would be accommodated on sites currently designated for housing development; however, there is a shortfall of sites to accommodate the City's full housing need. The majority of actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. The programs included in the Housing Element would not change the potential location of development, increase the intensity of development, or result in development that is not consistent with the growth allowed under the City's General Plan. Implementation of the proposed Housing Element does not, in and of itself, directly cause new housing to be constructed in the City. However, the changes in land use designations and rezoning described above under Housing Sites will result in land use changes that could have an effect on the environment.

As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Housing Element would result in changing the General Plan land use designations and/or zoning on up to 42 opportunity sites. The Housing Element would change allowed land uses on up to 353.5 acres in order to accommodate up to approximately 8,843 high density residential units, an increase in 4,875 units over the adopted General Plan land use designations.

All 42 of the sites are designated for urban or residential uses in the adopted General Plan; none of the opportunity sites are designated for conservation or preservation uses. In evaluating the Project for potential environmental impacts related to consistency with land use plans, policies, and regulations, several General Plan policies must be examined for consistency.

The Project is consistent with General Plan policies related to environmental protections associated with land use, including those identified under Regulatory Setting that address the amount and location of growth, allowed uses, development densities and intensities, and project design, for the reasons that follow.

As required by state housing law, the City has prepared draft revisions to the adopted Housing Element, which responds to the current and near-term future housing needs of the community as assigned through the RHNA process. Accordingly, the draft Housing Element contains goals, policies, and implementing programs setting forth the City's approach to meeting its assigned

RHNA, including identifying an adequate supply of land that can be zoned at appropriate densities to accommodate housing demand in four income categories: above moderate, moderate, low, and very low. The Housing Element is a policy document, and the programs listed in the Housing Element would establish local legislative conditions supporting the potential development of new residential dwelling units in Elk Grove. As described in Chapter 2.0 Project Description, the programs would not change the location of planned urban uses in the General Plan or significantly increase the intensity of future development, except as described for the housing opportunity sites.

H-1 Action 2 requires high-density residential development within the Southeast Policy Area; however, no specific sites within the Southeast Policy Area are identified for a change in land use designation or zoning as part of the Project. Policy LU-32 of the General Plan requires detailed land use planning for the Southeast Policy Area or for projects to have a minimum of 75 acres and provide benefits as described under Policy LU-32. A separate planning process is underway to develop a strategic plan for the development of the entire 1,200-acre Southeast Policy Area.

Housing Element program H-1 Action 1 requires the City to maintain its inventory of adequate sites to accommodate the RHNA. As described in Chapter 2.0, the City does not have adequate sites to accommodate its lower income allocation. Table 2.0-1 in Chapter 2.0 identifies the opportunity sites considered for General Plan land use and zoning changes to allow high-density residential development. Sites 2, 3, 4, 5, 6, 7A, C-12, C-13, C-14, C-18, C-19, C-20, C-25, C-33, C-34, C-36, and C-39 are designated to allow high density residential development and would allow multi-family uses under the adopted General Plan land use designations. Site C-1 is designated for medium density residential use and would be redesignated for high density residential uses. Sites C-21 through C-23, C-26, C-32, and C-40 are designated for low density residential uses and would be redesignated for high density residential uses. Sites C-15 through C-17 are designated for estate residential uses and would be redesignated for high density residential uses. Sites C-2, C-8, C-9, and C-41 are designated for rural residential use and would be redesignated for high density residential uses. Sites C-6, C-24, C-28 through C-31, C-35, and C-37 are designated for commercial use and would be redesignated for high density residential uses. Sites C-7 and C-27 are designated for light industrial uses and would be redesignated for high density residential uses.

General Plan Goal 1-6 calls for safe and affordable housing for all persons. The amendments to the Housing Element are the direct implementation of this General Plan goal in that the Housing Element is intended to meet the current and future housing needs of the community by identifying an adequate supply of land that can be zoned at appropriate densities to accommodate housing demand in four income categories: above moderate, moderate, low, and very low. The Housing Sites have been identified as potential sites that could be used to address the remaining need for housing on the General Plan map. General Plan Policy LU-40 calls for 15 acres located at Sheldon, Bruceville, and Big Horn Roads, to be designated for high density residential development. Housing Site C-41 would be redesignated from Rural Residential to High Density Residential and will directly implement this policy. Policy LU-25 calls for the development of at least 64 acres of high density residential within the East Franklin Policy Area. Housing Sites C-15 through C-17 would implement this goal through redesignation from Estate Residential to High Density Residential. Policy LU-29 calls for a minimum of four percent high density residential in the Laguna Ridge Policy Area. A number of sites are designated already for high density residential development in this area and Sites 3, 4, and 5 would provide additional capacity for high density residential development.

General Plan Policy LU-6 encourages multi-family housing sites to be located close to commercial areas, major roadways, and public transit to encourage pedestrian rather than vehicle traffic. This policy is intended to reduce air pollutant emissions through land use planning and is further discussed in Section 3.2, Air Quality, of this EIR. Housing Element H-3 Action 1 is consistent with this policy as it continues to encourage multifamily development throughout the City and uses the following guidelines in identifying opportunity locations for new multifamily housing: proximity to public transit or bus service; proximity to commercial and social services; parcel size and configuration which enhances the feasibility of development; lack of physical constraints (noise, wetlands); provision for a variety of housing types and affordable housing opportunities; of appropriate side to provide for on-site management of the facility; integration and compatibility with surrounding development; and proximity to other multifamily development. The Housing Sites for which a General Plan amendment is proposed are consistent with these guidelines.

This Draft EIR identifies potential environmental constraints associated with implementation of the Project. Environmental issues are discussed in Section 3.1 through 3.12 and Chapter 4.0 of this Draft EIR. Specifically, aesthetic and light/glare impacts are discussed in Section 3.1, air quality impacts in Section 3.2, biological resources impacts, including special-status species and sensitive habitat, in Section 3.3, greenhouse gases and climate change impacts in Section 3.4, hazards and hazardous materials impacts in Section 3.5, hydrology and water quality impacts in Section 3.6, noise impacts in Section 3.8, population growth in Section 3.9, public services and recreation impacts in Section 3.10, transportation and circulation impacts in Section 3.11, utilities impacts in Section 3.12, and cumulative and growth-inducing impacts in Chapter 4.0.

Subsequent development that is consistent with the Housing Element, including the development of the opportunity sites, single family and multifamily residential uses, emergency shelter uses, farmworker housing, and second units, would be required to be consistent with the General Plan, including policies and programs adopted to address environmental impacts. These subsequent projects would be reviewed for consistency with the City's adopted planning requirements as part of the design review process. The Project would not remove or modify any policies or measures from the General Plan that are intended for environmental protection and would not conflict with any General Plan policies or measures that are intended for environmental protection.

The Project could result in potential adverse environmental impacts, including to traffic, noise, water quality, biological resources, drainage and water quality, air quality, hazards, geology/soils, and cultural resources. Impacts to these resources, including consistency with applicable plans, policies, and regulations, are evaluated in the appropriate sections of this EIR.

CONSISTENCY WITH THE ZONING CODE

As noted above in discussion of General Plan consistency, the Project would expand the permitted density in the RD-25 zoning district as described in Chapter 2.0 Project Description, and would also rezone the opportunity sites to RD-25, as shown in Table 2.0-1. The intended use of the sites for multi-family residential uses will then be consistent with the zoning designation. Subsequent individual development projects will be required to be consistent with the Zoning Code, including the including the allowable uses and development standards established in Division III and the site planning and general development standards established in Division IV. The opportunity sites would be required to go through the design review process to ensure these sites be developed such that the character, size, massing, and design are compatible with the surrounding

neighborhood and that the relevant portions of the Municipal Code, including Title 23, that avoid or mitigate an environmental impact are addressed.

The proposed update to the Housing Element, including the changes in the land use designations of the Housing Sites as described in Chapter 2.0, would not conflict with land use policies, plans, or regulations adopted to mitigate an environmental effect. As previously discussed, subsequent development projects would be required to be consistent with all applicable policies, standards, and regulations and would be reviewed for consistency through the design review process. Any potential environmental impact associated with conflicts with land use requirements would be **less than significant**.

REFERENCES

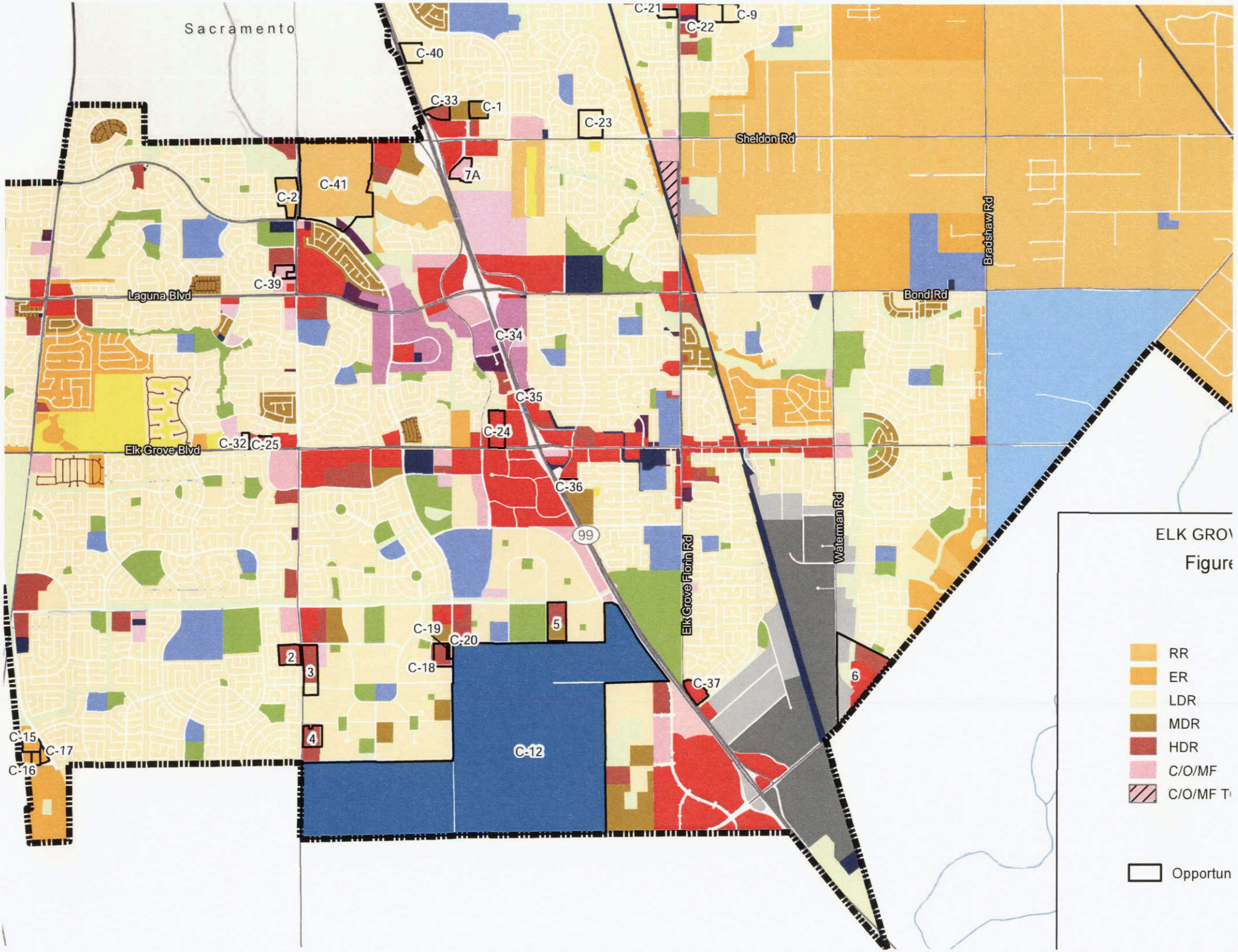
City of Elk Grove, 2003a. *City of Elk Grove General Plan.* Elk Grove, California. August 2003.

City of Elk Grove. 2003b. *City of Elk Grove General Plan, Volume 1: Draft Environmental Impact Report, SCH #: 2002062082.* Elk Grove, California. August 2003.

City of Elk Grove. 2003c. *Elk Grove General Plan Background Report.* Elk Grove, California. August 2003.

City of Elk Grove. 2013. *City of Elk Grove Municipal Code, Title 23 Zoning Code*. Elk Grove, California. Available at: http://www.egplanning.org/index.asp. Accessed: July 10, 2013.

This page left intentionally blank.


Sacramento
C-40
C-33
C-1
C-21
C-22
C-9
C-23
Sheldon Rd
7A
C-41
C-2
Bradshaw Rd
C-39
Laguna Blvd
Bond Rd
C-34
C-35
C-24
Elk Grove Blvd
C-32
C-25
C-36
99
Waterman Rd
Elk Grove Florin Rd
5
C-19
C-20
2
3
C-18
6
C-37
4
C-15
C-17
C-16
C-12
ELK GROV
Figure
RR
ER
LDR
MDR
HDR
C/O/MF
C/O/MF T
Opportun

This section provides a general description of the existing noise sources, a discussion of the regulatory setting, and identifies potential noise impacts associated with the Project. Project impacts are evaluated relative to applicable noise level criteria and to the existing ambient noise environment. Mitigation measures have been identified for significant noise-related impacts.

3.8.1 ENVIRONMENTAL SETTING

KEY TERMS

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.
CNEL	Community noise equivalent level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second (Hertz).
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50 percent of the time during the one hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
SEL	Sound exposure levels. A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.

FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is perceived to be half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, L_{dn} , and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is similar to

L_{dn} , but includes a +5 dB penalty for evening noise. Table 3.8-1 lists several examples of the noise levels associated with common situations.

TABLE 3.8-1: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	*NOISE LEVEL (DBA)*	*COMMON INDOOR ACTIVITIES*
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. NOVEMBER 2009.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE LEVELS

Traffic Noise Levels

The FHWA Highway Traffic Noise Prediction Model (FHWA-RD 77-108) was used to develop L_{dn} (24-hour average) noise contours for the primary project-area roadways. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA Model predicts hourly Leq values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB. To predict L_{dn} values, it is necessary to determine the hourly distribution of traffic for a typical 24-hour period.

Existing traffic volumes were obtained from the traffic analysis prepared for the Project by Fehr & Peers. Day/night traffic distributions were based upon continuous hourly noise measurement data collected and file data for similar roadways. Using these data sources and the FHWA traffic noise prediction methodology, traffic noise levels were calculated for existing conditions. Table 3.8-2 shows the results of this analysis. Appendix D-1 provides the complete inputs and results for the FHWA traffic noise modeling.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. Where traffic noise barriers are predominately along a roadway segment, a -5 dB offset was added to the noise prediction model. In some locations sensitive receptors may be located at distances which vary from the assumed calculation distance and may experience shielding from intervening barriers or sound walls. However, the traffic noise analysis is believed to be representative of the majority of sensitive receptors located closest to the project-area roadway segments analyzed in this report.

The actual distances to noise level contours may vary from the distances predicted by the FHWA model due to roadway curvature, grade, shielding from local topography or structures, elevated roadways, or elevated receivers. The distances reported in Table 3.8-2 are generally considered to be conservative estimates of noise exposure along the project-area roadways. It should be noted

that these contour distances include a -5 dB offset for roadway segments that predominately include noise barriers at residential areas.

TABLE 3.8-2: PREDICTED EXISTING TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT		NOISE LEVEL AT CLOSEST RECEPTORS (LDN)	DISTANCES TO TRAFFIC NOISE CONTOURS, LDN (FEET)		
	FROM	TO		70 DB	65 DB	60 DB
Big Horn Boulevard	Franklin Boulevard	Laguna Boulevard	58.3	17	36	78
Big Horn Boulevard	Laguna Boulevard	Elk Grove Boulevard	57.7	15	33	71
Big Horn Boulevard	Elk Grove Boulevard	Kammerer Road Road	57.7	15	33	70
Bradshaw Road	Vintage Park Road	Calvine Road	60.8	24	52	112
Bradshaw Road	Calvine Road	Bond Road	61.6	42	90	193
Bradshaw Road	Bond Road	Grant Line Road	59.3	19	42	90
Bruceville Road	Jacinto Road	Sheldon Road	57.8	15	33	72
Bruceville Road	Sheldon Road	Laguna Boulevard	61.9	29	62	133
Bruceville Road	Laguna Boulevard	Elk Grove Boulevard	60.1	22	47	101
Bruceville Road	Elk Grove Boulevard	Bilby Road	59.9	21	46	99
Calvine Road	Power Inn Road	Elk Grove-Florin Road	63.3	36	77	166
Calvine Road	Elk Grove-Florin Road	Bradshaw Road	59.1	19	41	87
Calvine Road	Bradshaw Road	Grant Line Road	60.9	25	53	114
Center Parkway	Sheldon Road	Jacinto Road	57.6	15	32	69
Elk Grove Boulevard	Interstate 5	Franklin Boulevard	63.0	34	74	159
Elk Grove Boulevard	Franklin Boulevard	Bruceville Road	63.0	34	74	159
Elk Grove Boulevard	Bruceville Road	Big Horn Boulevard	63.4	36	78	168
Elk Grove Boulevard	Big Horn Boulevard	East Stockton Boulevard	61.4	40	86	185
Elk Grove Boulevard	East Stockton Boulevard	Elk Grove-Florin Rd	65.5	38	81	174
Elk Grove Boulevard	Elk Grove-Florin Rd	Waterman Road Road	60.4	14	30	64
Elk-Grove Florin Road	Vintage Park Road	Calvine Road	62.6	32	69	148

TABLE 3.8-2: PREDICTED EXISTING TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT		NOISE LEVEL AT CLOSEST RECEPTORS (LDN)	DISTANCES TO TRAFFIC NOISE CONTOURS, LDN (FEET)		
	FROM	TO		70 DB	65 DB	60 DB
Elk Grove-Florin Road	Calvine Road	Bond Road	61.1	26	55	119
Elk Grove-Florin Road	Bond Road	Elk Grove Boulevard	60.7	14	31	67
Elk Grove-Florin Road	Elk Grove Boulevard	East Stockton Boulevard	57.8	8	17	36
Grant Line Road	State Route 99	East Stockton Boulevard	64.4	42	91	196
Grant Line Road	East Stockton Boulevard	Bradshaw Road	65.5	50	108	233
Kammerer Road	Big Horn Boulevard	Lent Ranch Parkway	65.7	31	67	145
Laguna Boulevard	Interstate 5	Franklin Boulevard	62.5	31	68	146
Laguna Boulevard	Franklin Boulevard	Bruceville Road	61.3	26	57	122
Laguna Boulevard	Bruceville Road	Big Horn Boulevard	62.2	30	65	140
Laguna Boulevard	Big Horn Boulevard	East Stockton Boulevard	68.7	81	175	378
Sheldon Road	Center Parkway	East Stockton Boulevard	61.6	27	59	127
Sheldon Road	East Stockton Boulevard	Elk Grove-Florin Road	63.1	24	52	112
Sheldon Road	Elk Grove-Florin Road	Bradshaw Road	66.4	58	125	268
State Route 99	Eschinger Road	Grant Line Road	71.3	267	575	1239
State Route 99	Grant Line Road	Elk Grove Boulevard	68.5	112	241	520
State Route 99	Elk Grove Boulevard	Laguna Boulevard	69.9	148	320	689
State Route 99	Laguna Boulevard	Sheldon Road	69.0	173	372	801
State Route 99	Sheldon Road	Calvine Road	70.4	150	322	694
State Route 99	Calvine Road	Stockton Boulevard	74.8	354	762	1642
Waterman Road	Calvine Road	Vintage Park Road	60.3	13	29	63
Waterman Road	Calvine Road	Bond Road	62.4	19	40	86
Waterman Road	Bond Road	Grant Line Road	62.4	19	40	86

TABLE 3.8-2: PREDICTED EXISTING TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT		NOISE LEVEL AT CLOSEST RECEPTORS (LDN)	DISTANCES TO TRAFFIC NOISE CONTOURS, LDN (FEET)		
	FROM	TO		70 DB	65 DB	60 DB
Interstate 5	Twin Cities Road	Hood-Franklin Road	70.7	222	478	1030
Interstate 5	Hood-Franklin Road	Elk Grove Boulevard	64.7	111	239	515
Interstate 5	Elk Grove Boulevard	Laguna Boulevard	66.3	130	280	604
Interstate 5	Laguna Boulevard	Pocket Road	68.6	169	364	784

NOTES: DISTANCES TO TRAFFIC NOISE CONTOURS ARE MEASURED IN FEET FROM THE CENTERLINES OF THE ROADWAYS.
SOURCE: FEHR & PEERS, CALTRANS, AND J.C. BRENNAN & ASSOCIATES, INC., 2013.

Railroad Noise Levels

Railroad activity occurs on two north/south Union Pacific Railroad (UPRR) lines through Elk Grove. One line is located west of Franklin Boulevard. The second, and busier line, is located east of SR 99

In order to quantify noise exposure from existing train operations, a continuous (24-hour) noise level measurement survey was conducted adjacent to each of the railroad lines. The purpose of the noise level measurements was to determine the typical Sound Exposure Level (SEL) for railroad line operations, while accounting for the effects of travel speed, warning horns, and other factors which may affect noise generation. In addition, the noise level measurement equipment was programmed to identify individual train events, so that the typical number of train operations could be determined.

Locations of continuous noise monitoring sites are shown on Figure 3.8-1. Table 3.8-3 shows a summary of the continuous noise measurement results.

TABLE 3.8-3: RAILROAD NOISE MEASUREMENT RESULTS

MEASUREMENT LOCATION	RAILROAD TRACK	GRADE CROSSING/ WARNING HORN	TRAIN EVENTS PER 24-HR PERIOD	DISTANCE TO CL	SEL
LT-2	UPRR (East RR Line)	Yes	38	50'	107 dB
LT-4	UPRR (West RR Line)	Yes	6	110'	101 dB

SOURCE: J.C. BRENNAN & ASSOCIATES, INC - 2013

Noise measurement equipment consisted of Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters equipped with LDL ½" microphones. The measurement systems were calibrated using an LDL Model CAL200 acoustical calibrator before and after testing. The measurement equipment meets all of the pertinent requirements of the American National Standards Institute (ANSI) for Type 1 (precision) sound level meters.

To determine the distances to the day/night average (L_{dn}) railroad contours, it is necessary to calculate the L_{dn} for typical train operations. This was done using the SEL values and above-described number and an even day/night distribution of daily freight train operations. The L_{dn} may be calculated as follows:

$$L_{dn} = SEL + 10 \log N_{eq} - 49.4 \text{ dB, where:}$$

SEL is the mean Sound Exposure Level of the event, N_{eq} is the sum of the number of daytime events (7 a.m. to 10 p.m.) per day, plus 10 times the number of nighttime events (10 p.m. to 7 a.m.) per day, and 49.4 is ten times the logarithm of the number of seconds per day.

Based upon the above-described noise level data, number of operations and methods of calculation, the L_{dn} value for railroad line operations have been calculated, and the distances to the L_{dn} noise level contours are shown in Table 3.8-4.

TABLE 3.8-4: APPROXIMATE DISTANCES TO THE RAILROAD NOISE CONTOURS

LDN AT MEASUREMENT SITE	DISTANCE TO LDN CONTOUR		
	60 DB	65 DB	70 DB
UPRR LINE – EAST LINE			
80 dB @ 50 feet – With Warning Horns	1,087 feet	504 feet	234 feet
UPRR LINE – WEST LINE			
66 dB @ 110 feet – With Warning Horns	276 feet	128 feet	59 feet

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2013.

Community Noise Survey

A community noise survey was conducted to document existing ambient noise levels at a representative sampling of the housing element sites. Continuous 24-hour noise monitoring was conducted at four sites to record day-night statistical noise level trends. The data collected included the hourly average (Leq), median (L50), and the maximum level (Lmax) during the measurement period. Noise monitoring sites and the measured noise levels at each site are summarized in Table 3.8-5. Figure 3.8-1 shows the locations of the noise monitoring sites. Appendix D-2 provides the completed 24-hr noise monitoring results.

Community noise monitoring equipment included Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters equipped with LDL ½" microphones. The measurement systems were calibrated using an LDL Model CAL200 acoustical calibrator before and after testing. The measurement equipment meets all of the pertinent requirements of the American National Standards Institute (ANSI) for Type 1 (precision) sound level meters.

TABLE 3.8-5: EXISTING AMBIENT NOISE MONITORING RESULTS

SITE	LOCATION	LDN (DBA)	MEASURED HOURLY NOISE LEVELS, DBA LOW-HIGH (AVERAGE)					
			DAYTIME (7:00 AM - 10:00 PM)			NIGHTTIME (10:00 PM – 7:00 AM)		
			LEQ	L50	LMAX	LEQ	L50	LMAX
LT-1	Near Site 7A. 225 feet east of SR 99, 200 feet north of First Baptist Church.	64	55-63 (59)	51-62 (56)	65-80 (74)	51-61 (57)	46-60 (52)	68-80 (74)
LT-2	On Sites 8-11. 50 feet from UPRR centerline.	80	53-80 (74)	46-57 (50)	68-101 (94)	59-77 (73)	40-54 (46)	87-100 (95)
LT-3	On Site 6. 200 feet to centerline of Grant Line Road, 180 feet to centerline of Waterman Road.	67	60-66 (64)	60-65 (63)	67-77 (73)	57-63 (60)	56-62 (58)	70-77 (72)
LT-4	Near Site C15-17. 135 feet to RR centerline, 300 feet from Bilby Road centerline.	65	46-72 (64)	40-52 (45)	59-103 (75)	38-65 (56)	37-48 (41)	48-87 (59)
ST-1	Site C7. 100 feet from centerline of Laguna Blvd.	NA	68	66	74	Traffic noise is primary noise source.		
ST-2	Site C10. 100 feet from centerline of Elk Grove Blvd.	NA	66	63	84	Traffic noise is primary noise source.		
ST-3	Site C25. 110 feet from centerline of Elk Grove Blvd.	NA	60	59	67	Traffic noise is primary noise source.		
ST-4	Site C3. 115 feet to centerline of Center Parkway.	NA	60	58	65	Traffic noise is primary noise source.		
ST-5	Site C37. 200 feet from centerline of SR 99.	NA	67	65	74	Traffic noise is primary noise source.		

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. - 2013

The results of the community noise survey shown in Table 3.8-5 indicate that existing transportation noise sources were the major contributor of noise observed during daytime and nighttime hours.

3.8.2 REGULATORY FRAMEWORK

STATE

Governor's Office of Planning and Research (OPR)

The State of California General Plan Guidelines (State of California 1998), published by OPR provides guidance for the acceptability of projects within specific CNEL contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations establishes uniform minimum noise insulation performance standards to protect persons within new buildings

which house people, including hotels, motels, dormitories, apartment houses and dwellings other than single-family dwellings.

Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room. Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

LOCAL

City of Elk Grove General Plan

The General Plan Noise Element establishes policies and noise level criteria both for transportation noise sources and for non-transportation (stationary) noise sources. The following are the primary policies that are pertinent to the Project:

> **Policy NO-1:** New development of the uses listed in Tables NO-C shall conform with the noise levels contained in that Table. All indoor and outdoor areas shall be located, constructed, and/or shielded from noise sources in order to achieve compliance with the City's noise standards.
>
> **Policy NO-2:** Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table NO-C or the performance standards of Table NO-A, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.
>
> **Policy NO-3:** Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table NO-A as measured immediately within the property line of lands designated for noise-sensitive uses.
>
> **NO-3, Action 1:** Limit construction activity to the hours of 7 a.m. to 7 p.m. whenever such activity is adjacent to residential uses.
>
> **NO-3, Action 2:** Consider limiting the hours of operation for loading docks, trash compactors, and other noise-producing uses in commercial areas which are adjacent to residential uses.
>
> **NO-3, Action 3:** The City shall require that stationary construction equipment and construction staging areas be set back from existing noise-sensitive land uses.

Transportation Noise Source Criteria

For transportation noise sources, the Noise Element establishes a land use compatibility standard of 60 dB L_{dn} in outdoor activity areas of residential land uses. The intent of this standard is to

provide an acceptable noise environment for outdoor activities. In addition, an interior noise level standard of 45 dB L_{dn} is applied to all residential uses and 40 dB L_{eq} is applied to interior spaces of churches. The intent of this standard is to provide a suitable environment for indoor communication and sleep.

Where it is not possible (reasonable or feasible) to reduce noise in outdoor activity areas to 60 dB L_{dn} or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} may be allowed, provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with the 45 dB L_{dn} standard, as shown in Table 3.8-6.

TABLE 3.8-6 (TABLE NO-C OF THE GENERAL PLAN): MAXIMUM ALLOWABLE NOISE EXPOSURE – TRANSPORTATION NOISE SOURCES

Land Use	Outdoor Activity Areas [1] L_{dn}/CNEL, dB	Interior Spaces	
		L_{dn}/CNEL, dB	L_{eq}, dB [2]
Residential	60[3]	45	–
Residential subject to noise from railroad tracks, aircraft over-flights	60[3]	40[5]	–
Transient Lodging	60[4]	45	–
Hospitals, Nursing Homes	60[3]	45	–
Theaters, Auditoriums, Music Halls	–	–	35
Churches, Meeting Halls	60[3]	–	40
Office Buildings	–	–	45
Schools, Libraries, Museums	–	–	45
Playgrounds, Neighborhood Parks	70	–	–

Source: City of Elk Grove 2005 (Table NO-C)

Notes:

1. *Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.*
   Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.
2. *As determined for a typical worst-case hour during periods of use.*
3. *Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best -available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.*
4. *In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.*
5. *The intent of this noise standard is to provide increased protection against sleep disturbance for residences located near railroad tracks.*

Non-Transportation Noise Sources

Table 3.8-7 provides the noise level performance criteria for new projects that are affected by or including non-transportation noise sources, such as those attributed to commercial developments. These criteria are applied at the property line of noise-sensitive land uses.

TABLE 3.8-7 (TABLE NO-A OF THE GENERAL PLAN): EXTERIOR HOURLY NOISE LEVEL PERFORMANCE STANDARDS FOR TYPICAL STATIONARY NOISE SOURCES

Noise Level Descriptor	Maximum Acceptable Noise Level, dBA	
	Daytime (7 a.m. – 10 p.m.)	Nighttime (10 p.m. – 7 a.m.)
Hourly L_{eq}, dB	55	45

Source: City of Elk Grove 2005 (Table NO-A)

The standards shown in Table 3.8-7 are lowered by 5 dB for noise sources that are tonal in nature, impulsive or repetitive, or consist primarily of speech or music (e.g., humming sounds, outdoor speaker systems). Typical noise sources in this category include pile drivers, drive-through speaker boxes, punch presses, steam valves, and transformer stations.

The City may impose noise level standards which are more or less restrictive than those specified above based upon determination of existing low or high ambient noise levels.

CITY OF ELK GROVE MUNICIPAL CODE

Chapter 6.32 of the Elk Grove Municipal Code provides exemptions for certain noise sources. Section 6.32.100D exempts any mechanical device, apparatus, or equipment related to or connected with emergency activities or emergency work; the exemption does not include permanently installed emergency generators. Section 6.32.100E exempts noise sources associated with construction, repair, remodeling, demolition, paving, or grading on any real property, provided said activities do not take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday and on each Sunday after the hour of 8:00 p.m.; provided, however, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary to completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor owner.

3.8.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact related to noise if it will result in:

- Exposure of persons to, or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels within two miles of a public airport or public use airport; or
- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

There are no public use airports located within two miles of any of the housing element sites, therefore potential aircraft noise is not discussed further in this study.

NOISE STANDARDS

The California Environmental Quality Act (CEQA) guidelines define a significant impact of a project if it "increases substantially the ambient noise levels for adjoining areas."

Table 3.8-8 is based on recommendations made in August 1992 by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been widely accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn}.

TABLE 3.8-8: SIGNIFICANCE OF CHANGES IN CUMULATIVE NOISE EXPOSURE

Ambient Noise Level Without Project, L_{dn}	Increase Required for Significant Impact
<60 dBA	+5.0 dB or more
60–65 dBA	+3.0 dB or more
>65 dBA	+1.5 dB or more

Source: FICON 1992

Based on Table 3.8-8, an increase in the traffic noise level of 1.5 dB or more would be significant where the ambient noise level exceeds 65 dB L_{dn}. The rationale for the Table 3.8-8 criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause significant annoyance. Where existing noise levels are less than 60 dBA, an increase of 5 dBA or more would be required before significant annoyance would be likely to occur.

VIBRATION STANDARDS

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

The Municipal Code Section 23.60.060 prohibits perceptible levels of ground vibration as outlined below:

> ***23.60.060 VIBRATION.***
> Uses that generate vibrations that may be considered a public nuisance or hazard on any adjacent property shall be cushioned or isolated to prevent generation of vibrations. Uses shall be operated in compliance with the following provisions:
>
> A. Uses shall not generate ground vibration that is perceptible without instruments by the average person at any point along or beyond the property line of the parcel containing the activities;
>
> B. Uses, activities, and processes shall not generate vibrations that cause discomfort or annoyance to reasonable persons of normal sensitivity or which endanger the comfort, repose, health or peace of residents whose property abuts the property line of the parcel;
>
> C. Uses shall not generate ground vibration that interferes with the operations of equipment and facilities of adjoining parcels; and
>
> D. Vibrations from temporary construction/demolition and vehicles that leave the subject parcel (e.g., trucks, trains, and aircraft) are exempt from the provisions of this section. [Ord. 26-2006 §3, eff. 8-11-2006]

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 3.8-9 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v. The threshold of damage to buildings is approximately 0.2 in/sec p.p.v.

TABLE 3.8-9: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

PEAK PARTICLE VELOCITY MM/SECOND	*PEAK PARTICLE VELOCITY INCHES/SECOND*	*HUMAN REACTION*	*EFFECT ON BUILDINGS*
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBORNE VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: Potential to result in substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project - traffic noise (Less than Significant)

To describe future noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. Direct inputs to the model included traffic volumes provided by Fehr & Peers. The FHWA model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly Leq values for free-flowing traffic conditions. To predict L_{dn}/CNEL values, it is necessary to determine the day/night distribution of traffic and adjust the traffic volume input data to yield an equivalent hourly traffic volume.

Table 3.8-10 shows the noise levels associated with traffic on the local roadway network under the Current General Plan and Current General Plan Plus Project traffic conditions. As indicated by Table 3.8-10, the related noise level increases under development of the Project are predicted to range between 0 to 0.1 dB.

Some noise sensitive receptors located along the project-area roadways are currently exposed to exterior traffic noise levels exceeding the City's 60 dB L_{dn} exterior noise level standard for residential uses, as shown in Table 3.8-6. As shown in Table 3.8-10, these receptors will continue to experience elevated exterior noise levels with implementation of the Project. The Project's contribution to traffic noise increases was quantified to be approximately 0.1 dB or less and, based on the model, will not significantly increase noise levels.

The Project would not cause increased noise levels exceeding the City's 60 dB L_{dn} exterior noise level standard at existing noise-sensitive residential receptors. Additionally, the noise increases associated with the Project do not exceed the FICON criteria outlined in Table 3.8-8. Traffic associated with the Project is not anticipated to result in exposure of persons to traffic noise levels in excess of the City's standards nor would project traffic result in a substantial increase in ambient noise levels. Therefore, this impact is **less than significant**.

TABLE 3.8-10: CURRENT GENERAL PLAN TRAFFIC NOISE LEVELS VS. CURRENT GENERAL PLAN PLUS PROJECT TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT		NOISE LEVELS (LDN, DB)		
	FROM	TO	CURRENT GP	CURRENT GP + PROJECT	CHANGE (DB)
BIG HORN BOULEVARD	FRANKLIN BOULEVARD	LAGUNA BOULEVARD	60.4	60.4	0.0
BIG HORN BOULEVARD	LAGUNA BOULEVARD	ELK GROVE BOULEVARD	61.6	61.6	0.0
BIG HORN BOULEVARD	ELK GROVE BOULEVARD	KAMMERER ROAD	62.7	62.7	0.0
BRADSHAW ROAD	VINTAGE PARK ROAD	CALVINE ROAD	63.6	63.6	0.0
BRADSHAW ROAD	CALVINE ROAD	BOND ROAD	65.3	65.3	0.0
BRADSHAW ROAD	BOND ROAD	GRANT LINE ROAD	62.4	62.4	0.0
BRUCEVILLE ROAD	JACINTO ROAD	SHELDON ROAD	58.8	58.9	0.0
BRUCEVILLE ROAD	SHELDON ROAD	LAGUNA BOULEVARD	63.2	63.2	0.0
BRUCEVILLE ROAD	LAGUNA BOULEVARD	ELK GROVE BOULEVARD	62.5	62.6	0.1
BRUCEVILLE ROAD	ELK GROVE BOULEVARD	BILBY ROAD	61.4	61.5	0.1
CALVINE ROAD	POWER INN ROAD	ELK GROVE-FLORIN ROAD	63.6	63.7	0.1
CALVINE ROAD	ELK GROVE-FLORIN ROAD	BRADSHAW ROAD	59.4	59.4	0.0
CALVINE ROAD	BRADSHAW ROAD	GRANT LINE ROAD	61.1	61.2	0.1
CENTER PARKWAY	SHELDON ROAD	JACINTO ROAD	59.5	59.6	0.1
ELK GROVE BOULEVARD	INTERSTATE 5	FRANKLIN BOULEVARD	63.4	63.5	0.0
ELK GROVE BOULEVARD	FRANKLIN BOULEVARD	BRUCEVILLE ROAD	63.9	64.0	0.1
ELK GROVE BOULEVARD	BRUCEVILLE ROAD	BIG HORN BOULEVARD	64.5	64.7	0.1
ELK GROVE BOULEVARD	BIG HORN BOULEVARD	EAST STOCKTON BOULEVARD	61.9	61.9	0.1
ELK GROVE BOULEVARD	EAST STOCKTON BOULEVARD	ELK GROVE-FLORIN RD	65.7	65.7	0.0
ELK GROVE BOULEVARD	ELK GROVE-FLORIN RD	WATERMAN ROAD	62.5	62.5	0.0
ELK-GROVE FLORIN ROAD	VINTAGE PARK ROAD	CALVINE ROAD	63.9	63.9	0.0
ELK GROVE-FLORIN ROAD	CALVINE ROAD	BOND ROAD	62.3	62.3	0.1
ELK GROVE-FLORIN ROAD	BOND ROAD	ELK GROVE BOULEVARD	61.2	61.3	0.0
ELK GROVE-FLORIN ROAD	ELK GROVE BOULEVARD	EAST STOCKTON BOULEVARD	59.6	59.6	0.0
GRANT LINE ROAD	STATE ROUTE 99	EAST STOCKTON BOULEVARD	70.8	70.8	0.0

TABLE 3.8-10: CURRENT GENERAL PLAN TRAFFIC NOISE LEVELS VS. CURRENT GENERAL PLAN PLUS PROJECT TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT		NOISE LEVELS (LDN, DB)		
	FROM	TO	CURRENT GP	CURRENT GP + PROJECT	CHANGE (DB)
GRANT LINE ROAD	EAST STOCKTON BOULEVARD	BRADSHAW ROAD	65.5	65.5	0.0
KAMMERER ROAD	BIG HORN BOULEVARD	LENT RANCH PARKWAY	73.7	73.7	0.1
LAGUNA BOULEVARD	INTERSTATE 5	FRANKLIN BOULEVARD	62.9	62.9	0.0
LAGUNA BOULEVARD	FRANKLIN BOULEVARD	BRUCEVILLE ROAD	62.4	62.4	0.0
LAGUNA BOULEVARD	BRUCEVILLE ROAD	BIG HORN BOULEVARD	63.6	63.7	0.1
LAGUNA BOULEVARD	BIG HORN BOULEVARD	EAST STOCKTON BOULEVARD	70.0	70.0	0.1
SHELDON ROAD	CENTER PARKWAY	EAST STOCKTON BOULEVARD	64.2	64.3	0.1
SHELDON ROAD	EAST STOCKTON BOULEVARD	ELK GROVE-FLORIN ROAD	65.5	65.5	0.0
SHELDON ROAD	ELK GROVE-FLORIN ROAD	BRADSHAW ROAD	70.1	70.0	0.0
STATE ROUTE 99	ESCHINGER ROAD	GRANT LINE ROAD	71.9	71.9	0.0
STATE ROUTE 99	GRANT LINE ROAD	ELK GROVE BOULEVARD	69.9	69.9	0.0
STATE ROUTE 99	ELK GROVE BOULEVARD	LAGUNA BOULEVARD	71.1	71.1	0.0
STATE ROUTE 99	LAGUNA BOULEVARD	SHELDON ROAD	69.7	69.7	0.0
STATE ROUTE 99	SHELDON ROAD	CALVINE ROAD	71.0	71.0	0.0
STATE ROUTE 99	CALVINE ROAD	STOCKTON BOULEVARD	75.1	75.1	0.0
WATERMAN ROAD	CALVINE ROAD	VINTAGE PARK ROAD	63.0	63.0	0.0
WATERMAN ROAD	CALVINE ROAD	BOND ROAD	65.3	65.3	0.1
WATERMAN ROAD	BOND ROAD	GRANT LINE ROAD	65.2	65.2	0.1
INTERSTATE 5	TWIN CITIES ROAD	HOOD-FRANKLIN ROAD	72.4	72.4	0.0
INTERSTATE 5	HOOD-FRANKLIN ROAD	ELK GROVE BOULEVARD	66.2	66.2	0.0
INTERSTATE 5	ELK GROVE BOULEVARD	LAGUNA BOULEVARD	67.7	67.7	0.0
INTERSTATE 5	LAGUNA BOULEVARD	POCKET ROAD	69.4	69.5	0.0

[1] *Distances to traffic noise contours are measured in feet from the centerlines of the roadways. Actual distances may vary due to shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2013 (FHWA-RD-77-108 WITH INPUTS FROM FEHR & PEERS AND CALTRANS).

Impact 3.8-2: Potential to expose persons to, or generate noise levels in excess of applicable standards or to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project - construction noise (Potentially Significant)

While the Project does not propose or entitle any specific development projects, it will designate up to 42 sites for to accommodate high density residential uses as described in Chapter 2.0, Project Description. Potential subsequent development, maintenance of roadways, installation of public utilities, and infrastructure improvements will require construction activities. These activities include the use of heavy equipment and impact tools. Table 3.8-11 provides a list of the types of equipment which may be associated with construction activities and the associated noise levels.

TABLE 3.8-11: CONSTRUCTION EQUIPMENT NOISE

TYPE OF EQUIPMENT	PREDICTED NOISE LEVELS, LMAX DB				DISTANCES TO NOISE CONTOURS (FEET)	
	NOISE LEVEL AT 50'	NOISE LEVEL AT 100'	NOISE LEVEL AT 200'	NOISE LEVEL AT 400'	70 DB LMAX CONTOUR	65 DB LMAX CONTOUR
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Concrete Saw	90	84	78	72	500	889
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315
Jackhammer	89	83	77	71	446	792
Pneumatic Tools	85	79	73	67	281	500

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006. J.C. BRENNAN & ASSOCIATES, INC. 2013.

Activities involved in project construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. The nearest residential receptors would be located approximately 50-100 feet from construction activities occurring on the housing element sites. At these distances, construction related activities are predicted to generate maximum noise levels ranging between 76-90 dB Lmax.

While construction activities would occur between the hours exempted by the City, construction activities could result in a substantial temporary increase in ambient noise levels in the project vicinity above levels existing without the project. This is a **potentially significant** impact.

MITIGATION MEASURES

Mitigation Measure 3.8-1: *As part of the City's design review and entitlement process, the City shall require the following measures.*

The following measures, when applicable, shall be followed throughout all phases of construction to reduce noise from construction activities and shall be the responsibility of the construction contractor and project applicant:

- *Construction equipment shall be well maintained and used judiciously to be as quiet as practical. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.*
- *Use "quiet" models of air compressors and other stationary noise sources where technology exists.*
- *Locate stationary noise-generating equipment and construction staging areas as far as feasible from sensitive receptors, including neighboring residential uses, when sensitive receptors adjoin or are near a construction area.*
- *Prohibit unnecessary idling of internal combustion engines.*
- *Designate a "construction liaison" who shall be responsible for responding to any local complaints about construction noise. The liaison shall determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the liaison at the construction site.*
- *Hold a pre-construction meeting with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, construction schedule, and noise coordinator) are completed.*

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure 3.8-1 would reduce noise generated by the construction accommodated by the Project, in the form of best available construction noise controls, and require that these measures are implemented during all construction phases, to the maximum extent feasible. Construction noise impacts due to construction/demolition would be considered **less than significant** following implementation of Mitigation Measure 3.8-1.

Impact 3.8-3: Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels (Potentially Significant)

The primary vibration-generating activities associated with subsequent development accommodated by the Project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are generally located at distances greater than 50-100 feet from the housing element sites. However, construction activity at some of the housing element sites which abut existing developments could occur at distances of approximately 25 feet from existing structures. Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Municipal Code Section 23.60.060.D provides an exemption for perceptible levels of vibration occurring related to temporary construction or demolition activity. Therefore, this report will only address the potential for damage that could occur to structures due to construction vibration.

Table 3.8-12 shows the typical vibration levels produced by construction equipment.

TABLE 3.8-12: VIBRATION LEVELS FOR VARYING CONSTRUCTION EQUIPMENT

TYPE OF EQUIPMENT	PEAK PARTICLE VELOCITY @ 25 FEET (INCHES/SECOND)	PEAK PARTICLE VELOCITY @ 50 FEET (INCHES/SECOND)	PEAK PARTICLE VELOCITY @ 100 FEET (INCHES/SECOND)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (<0.200 @ 26')	0.074	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006

The Table 3.8-12 data indicate that construction vibration levels anticipated for the project are less than the 0.2 in/sec p.p.v. threshold of damage to buildings at distances of 26 feet or further. Therefore, construction vibrations are not predicted to cause damage to existing buildings for construction occurring at distances greater than 25 feet from existing structures. However, construction activity could occur at distances of less than 25 feet from existing buildings. Therefore, this impact would be considered **potentially significant.**

MITIGATION MEASURES

Mitigation Measure 3.8-2: *As part of the City's design review and entitlement process, the City shall require the following measures for construction projects located less than 25 feet from existing structures:*

- *The pre-existing condition of any buildings within 25 feet of any construction activities shall be recorded in order to evaluate damage from project-related construction. Fixtures and finishes within a 25-foot radius of construction activities susceptible to damage shall be documented (photographically and in writing) prior to construction. All damage shall be repaired back to its pre-existing condition.*
- *Should damage occur despite the above mitigation measures, construction operations shall be halted and the problem activity shall be identified. A qualified engineer shall establish vibration limits based on soil conditions and the types of buildings in the immediate area. The contractor shall monitor the buildings throughout the remaining construction period and follow all recommendations of the qualified engineer to repair any damage that has occurred to the pre-existing state, and to avoid any further structural damage.*

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure 3.8-2 would reduce construction vibration generated by the construction of the project to the maximum extent feasible. Construction vibration impacts due to construction/demolition would be reduced to a **less than significant** level.

Impact 3.8-4: Exposure of persons to, or generation of noise levels in excess of applicable standards (Potentially Significant)

The Housing Element would increase the development potential on 42 sites by re-designating and/or zoning land uses to include multifamily housing, or to increase the allowed density of existing multifamily housing sites, as described in Chapter 2.0, Project Description. The increase in development density and intensity on these housing sites could result in new sensitive residential receptors. The General Plan Noise Element specifies an acceptable exterior transportation noise level of 60 dB L_{dn} and conditionally acceptable up to 65 dB L_{dn} for exterior areas of residential uses, including common use areas. These standards are applied to both traffic and railroad noise sources. The City also establishes an interior noise level standard of 45 dB L_{dn} for residential receptors.

TRAFFIC AND RAILROAD NOISE

Table 3.8-13 below summarizes predicted traffic and railroad noise contours for each of the project-area roadways and railroad line. Any project falling within the 60 dB L_{dn} traffic or railroad noise contour distances shown may be exposed to transportation noise levels which could exceed the City's exterior or interior noise level standards.

TABLE 3.8-13: PREDICTED TRAFFIC AND RAILROAD NOISE CONTOUR DISTANCES WITH NO NOISE REDUCTION MEASURES

NOISE SOURCE	*FROM*	*TO*	*NOISE CONTOUR DISTANCE*		
			70 dB	*65 dB*	*60 dB*
Big Horn Boulevard	Franklin Boulevard	Laguna Boulevard	49	106	229
Big Horn Boulevard	Laguna Boulevard	Elk Grove Boulevard	60	129	277
Big Horn Boulevard	Elk Grove Boulevard	Kammerer Road	70	151	326
Bradshaw Road	Vintage Park Road	Calvine Road	81	174	374
Bradshaw Road	Calvine Road	Bond Road	73	157	338
Bradshaw Road	Bond Road	Grant Line Road	67	144	311
Bruceville Road	Jacinto Road	Sheldon Road	39	84	181
Bruceville Road	Sheldon Road	Laguna Boulevard	76	164	354
Bruceville Road	Laguna Boulevard	Elk Grove Boulevard	69	149	322
Bruceville Road	Elk Grove Boulevard	Bilby Road	58	125	270
Calvine Road	Power Inn Road	Elk Grove-Florin Road	81	175	378
Calvine Road	Elk Grove-Florin Road	Bradshaw Road	42	91	197
Calvine Road	Bradshaw Road	Grant Line Road	56	120	259
Center Parkway	Sheldon Road	Jacinto Road	43	94	202
Elk Grove Boulevard	Interstate 5	Franklin Boulevard	79	170	367

Noise Source	*From*	*To*	*Noise Contour Distance*		
			70 dB	*65 dB*	*60 dB*
Elk Grove Boulevard	Franklin Boulevard	Bruceville Road	85	183	395
Elk Grove Boulevard	Bruceville Road	Big Horn Boulevard	95	204	440
Elk Grove Boulevard	Big Horn Boulevard	East Stockton Boulevard	94	202	436
Elk Grove Boulevard	East Stockton Boulevard	Elk Grove-Florin Rd	39	84	180
Elk Grove Boulevard	Elk Grove-Florin Rd	Waterman Road	19	41	88
Elk-Grove Florin Road	Vintage Park Road	Calvine Road	84	181	390
Elk Grove-Florin Road	Calvine Road	Bond Road	66	142	307
Elk Grove-Florin Road	Bond Road	Elk Grove Boulevard	34	73	157
Elk Grove-Florin Road	Elk Grove Boulevard	East Stockton Boulevard	22	47	102
Grant Line Road	State Route 99	East Stockton Boulevard	113	244	526
Grant Line Road	East Stockton Boulevard	Bradshaw Road	108	233	503
Kammerer Road	Big Horn Boulevard	Lent Ranch Parkway	107	230	495
Laguna Boulevard	Interstate 5	Franklin Boulevard	73	156	337
Laguna Boulevard	Franklin Boulevard	Bruceville Road	67	144	311
Laguna Boulevard	Bruceville Road	Big Horn Boulevard	82	176	380
Laguna Boulevard	Big Horn Boulevard	East Stockton Boulevard	101	217	467
Sheldon Road	Center Parkway	East Stockton Boulevard	89	192	415
Sheldon Road	East Stockton Boulevard	Elk Grove-Florin Road	75	162	349
Sheldon Road	Elk Grove-Florin Road	Bradshaw Road	101	217	467
State Route 99	Eschinger Road	Grant Line Road	293	632	1362
State Route 99	Grant Line Road	Elk Grove Boulevard	295	635	1369
State Route 99	Elk Grove Boulevard	Laguna Boulevard	381	820	1767
State Route 99	Laguna Boulevard	Sheldon Road	409	881	1898
State Route 99	Sheldon Road	Calvine Road	350	754	1624
State Route 99	Calvine Road	Stockton Boulevard	374	806	1737
Waterman Road	Calvine Road	Vintage Park Road	44	95	204
Waterman Road	Calvine Road	Bond Road	63	136	292

NOISE SOURCE	*FROM*	*TO*	*NOISE CONTOUR DISTANCE*		
			70 dB	*65 dB*	*60 dB*
Waterman Road	Bond Road	Grant Line Road	62	133	288
Interstate 5	Twin Cities Road	Hood-Franklin Road	291	627	1350
Interstate 5	Hood-Franklin Road	Elk Grove Boulevard	301	648	1396
Interstate 5	Elk Grove Boulevard	Laguna Boulevard	351	755	1627
Interstate 5	Laguna Boulevard	Pocket Road	416	896	1931
UPRR Line – East Line	North City Limit	South City Limit	234	504	1087
UPRR Line – West Line	North City Limit	South City Limit	59	128	276

Most of the housing element sites located adjacent to arterial roadways, or in the proximity to the Union Pacific Railroad lines, would be exposed to exterior noise exceeding 60 dB L_{dn}. This is in excess of the City's "normally acceptable" noise level objectives of 60 dBA L_{dn}. Additionally, depending on site design and building construction, interior noise levels could exceed the City's 45 dB L_{dn} interior noise level standard. This is a **potentially significant** impact which will likely require noise control measures, such as site design measures, sound walls, acoustical windows, or other noise control measures. Such measures cannot practically be designed at this time because no specific projects have been designed and proposed at this time. Mitigation Measures 3.8-3 through 3.8-6 include design provisions that would reduce exposure to transportation related noise sources and such measures shall be considered on specific projects proposed as necessary to reduce noise impacts to less than significant.

STATIONARY NOISE SOURCES

Development of multi-family housing projects would result in new stationary noise sources, including mechanical equipment. Heating, air conditioning, and ventilation equipment are often mounted on roof tops, located on the ground, or located within mechanical rooms. The noise sources can take the form of fans, pumps, air compressors, chillers, or cooling towers. Noise levels from these types of equipment can vary significantly. Noise levels from these types of sources generally range between 45 dB to 65 dB at a distance of 50 feet, which could result in noise levels in excess of City standards at sensitive receptors adjacent the various housing sites. This is a **potentially significant** impact of the project. Mitigation Measure 3.8-7 would ensure that mechanical equipment associated with new development maintains an exterior noise level of 45 dBA Leq at on- and off-site sensitive receptor locations.

MITIGATION MEASURES

Mitigation Measure 3.8-3: *As part of the City's design review and entitlement process for housing Sites, the City shall require that sensitive exterior areas associated with future residential uses be located outside of the 60 dBA L_{dn} exterior traffic or railroad noise contour distances. If sensitive receptors are to be located within the 60 dBA L_{dn} exterior noise contour, outdoor activity areas shall be shielded from the noise source using site design measures such as building orientation or sound walls to maintain a 60 dBA L_{dn} (up to 65 dBA L_{dn} conditionally) exterior noise level for noise-sensitive exterior areas.*

Mitigation Measure 3.8-4: *As part of the City's design review and entitlement process for housing sites, the City shall require a project applicant to retain a qualified acoustical consultant to participate in the development of the final construction plans to ensure that sensitive residential buildings are designed with appropriate noise-attenuating construction features to maintain an acceptable interior noise level of 45 dBA L_{dn} at those habitable spaces exposed to exterior noise levels exceeding 60 dBA L_{dn} due to transportation noise sources. Feasible methods to achieve acceptable interior noise levels of 45 dBA L_{dn} may include site design techniques (orienting buildings away from significant noise sources, locating windows and doors on building walls that are not adjacent to the noise source, etc.) and/or building design techniques (various Sound Transmission Class (STC) rated sound dampening techniques, such as the installation of STC-rated windows; or employing the use of double-leaf partitions, noise insulation materials and/or resilient wall channels).*

Mitigation Measure 3.8-5: *As part of the City's design review and entitlement process for the housing element sites, the City shall require the Project Applicant to prepare and distribute a disclosure to all prospective occupants of the project describing the project's proximity to rail lines and the potential for train-related noise, including train warning horns: The disclosure shall specifically note that exterior areas may be exposed to periodic noise from warning horns.*

Mitigation Measure 3.8-6: *As part of the City's design review and entitlement process for multi-family sites, the City shall require forced-air mechanical ventilation for units throughout a multi-family residential project so that windows could be kept closed at the occupant's discretion to control interior noise and achieve the interior noise standard of 45 dBA L_{dn}. Closed windows typically provide 25 dBA of noise reduction.*

Mitigation Measure 3.8-7: *As part of the City's design review and entitlement process for the housing element sites, the City shall require site design to implement measures to reduce exposure of adjacent uses to noise associated with mechanical equipment and on-site play areas through use of setbacks and/or barriers (e.g., placement of walls, buildings, parapets, or other structures between the noise source and adjacent sensitive receptors) to ensure that mechanical equipment associated with new development on Sites 1, 2, and 5 maintains an exterior noise level of 45 dBA Leq at on- and off-site recreation and yard areas.*

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures 3.8-3 through 3.8-7 would ensure that best management practices to address noise impacts are used, including use of site design features to provide acoustical shielding to sensitive use areas to the degree feasible. Such measures may include shielding outdoor use areas by buildings or barriers. The proposed mitigation measures would ensure that future development accommodated by the Project is consistent with the City's noise standards. Therefore, this impact would be reduced to a **less than significant** level.

Impact 3.8-5: Potential to expose sensitive receptors to railroad vibrations (less than significant)

Several of the housing element sites are located along the UPRR rail corridors. j.c. brennan & associates, Inc. conducted vibration measurements for freight operations on a similar rail lines. The measurements

were conducted using a Larson Davis HVM100 vibration meter, equipped with a PCB Shear Model 353B51 accelerometer. The results of the measurements indicated that the PPV vibration levels on the ground ranged between 0.0365 and 0.065 (inches/second) at an approximate distance of 50 feet from the railroad centerline. At a distance of 40 feet from the centerline of the UPRR corridor, which is less than the distance of the UPRR right-of-way of approximately 50 feet from the centerline, this level would be up to 0.091 (inches/second) PPV. Therefore, sensitive uses are not expected to be exposed to structural vibration which would be in excess of normally acceptable criteria for vibration levels.

Therefore, future multifamily residential projects are not expected to be exposed to structural vibration which would be in excess of normally acceptable criteria for vibration levels. Therefore, this impact is **less than significant**.

Impact 3.8-6: Potential to expose persons to, or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies or to result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project (Less than Cumulatively Considerable)

The cumulative context for noise impacts associated with the Project consists of the existing and future noise sources that could affect the project or surrounding uses. Noise generated by construction would be temporary, and would not add to the permanent noise environment or be considered as part of the cumulative context. The total construction noise impact of the Project would be fairly small and would not be a substantial increase to the existing future noise environment.

TRAFFIC

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to the Project and other projects within the area. Table 3.8-10 shows cumulative traffic noise levels with and without the Project.

Under cumulative conditions, there would not be significant increases in noise levels compared to the no project conditions. The 60, 65, and 70 dB L_{dn} contours would extend farther under cumulative conditions. Specifically, the 60 dB L_{dn} traffic noise contours may expand by 1-12 feet under cumulative plus project conditions. However, as shown in Table 3.8-10 the Project would contribute no more than 0.1 dB L_{dn} to noise levels on roadways fronting residential uses along the study area roadways under the Project. These increases are less than the FICON test of significance outlined in Table 3.8-8.

Additionally, the project would not cause new exceedances of the City's 60 dB L_{dn} exterior noise level standard. Therefore, the project would have a **less than cumulatively considerable** contribution to potentially significant cumulative traffic noise impacts.

NON-TRAFFIC NOISE

The Project is not expected to create substantial non-traffic noise which is discussed separately below. Non-traffic noise includes increased pedestrian activity from the additional residential and business uses of the site. The number of people walking and interacting on surrounding roads would increase. This

could raise noise levels on these streets slightly, as more people utilize amenities in the area. This is not expected to substantially influence interior or exterior noise levels at nearby receptors. Mechanical equipment installed for heating, cooling, ventilation, and power supply would be placed indoors, shielded by mechanical barriers and/or rooftop parapets, or set back from adjoining sensitive receptors as required by Mitigation Measure 3.8-7. Any noise from this equipment is not likely to generate substantial amounts of noise off the project site. Consequently, this would not add to any cumulative noise levels and would result in a **less than cumulatively considerable** contribution to cumulative stationary noise levels.

This page left intentionally blank.

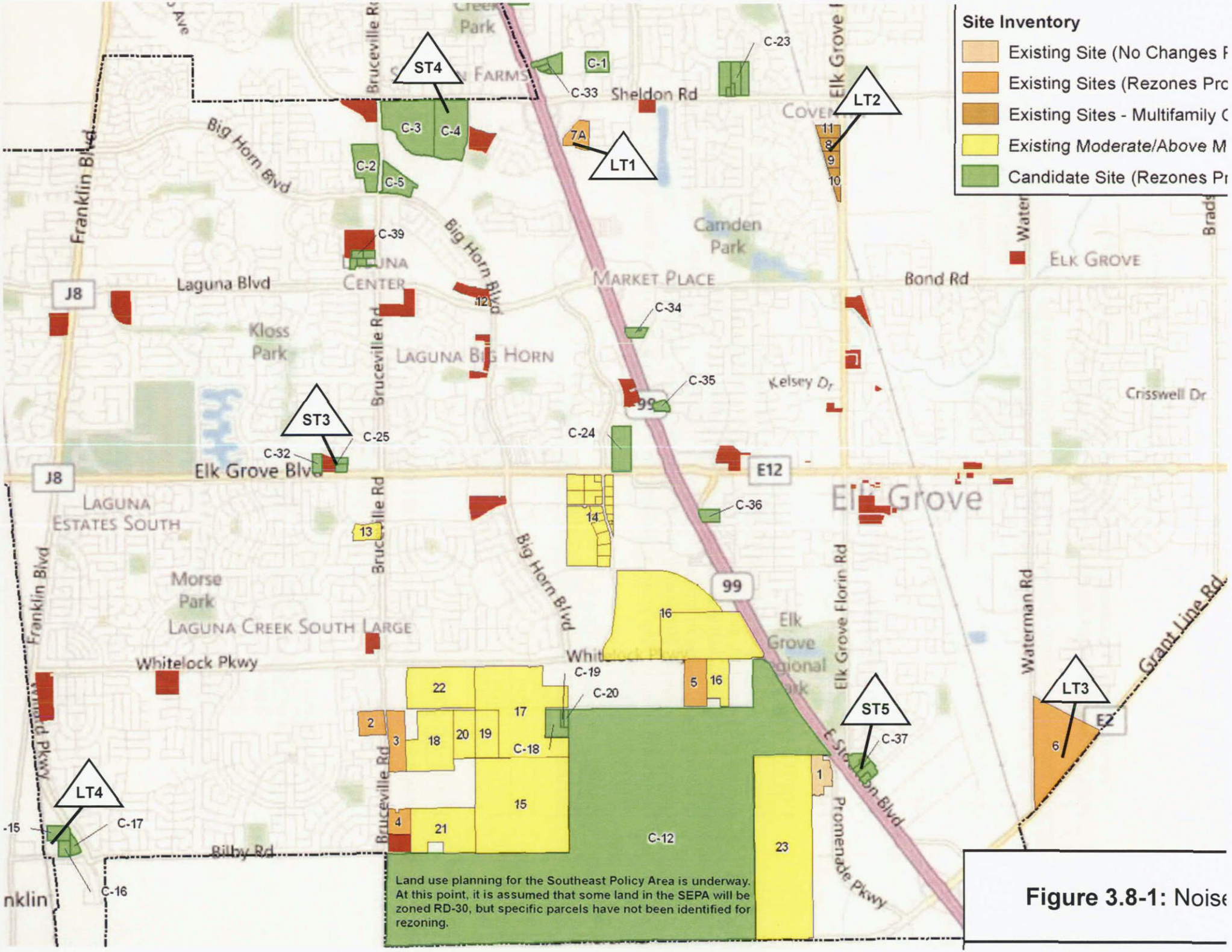


Figure 3.8-1: Noise

The purpose of this EIR section is to identify if the proposed Housing Element would impact the City by inducing substantial population growth or remove housing.

Information in this section is based on information provided by the following reference materials: *City of Elk Grove General Plan* (City of Elk Grove 2003a), the *City of Elk Grove General Plan Environmental Impact Report* (General Plan EIR) (City of Elk Grove 2003b), *Census 2000 (City of Elk Grove 2002), Draft Housing Element (City of Elk Grove 2013), Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2013, with 2010 Benchmark* (California Department of Finance 2013), and *Metropolitan Transportation Plan/Sustainable Communities Strategy (SACOG 2012).*

3.9.1 ENVIRONMENTAL SETTING

DEMOGRAPHICS

POPULATION TRENDS

From incorporation in 2000 until 2010, the population of the City increased by 111 percent, an average increase of 11 percent annually. Elk Grove's rapid population growth resulted from a number of factors, including the availability of land outside the downtown Sacramento area, new construction in the City, an increase in jobs in the Sacramento region, and the annexation of the Laguna West-Lakeside CDP (adding 25,000 residents to the City). According to Department of Finance estimates, the City's current population is 159,074. Population growth from 2000 to 2013 is shown in Table 3.9-1.

TABLE 3.9 -1: POPULATION GROWTH

YEAR	POPULATION	ANNUAL PERCENTAGE CHANGE
2000	72,665	--
2010	153,015	11.1%
2013	159,074	1.3%

SOURCE: CITY OF ELK GROVE 2002; US CENSUS, 2010; CALIFORNIA DEPARTMENT OF FINANCE, 2013

HOUSING STOCK

Table 3.9-2 summarizes the increase in the City's housing stock between 2000 and 2013. The number of housing units has increased from 24,310 in 2000 to 50,634 in 2010, an average annual increase of 10.8 percent. Since 2010, the housing stock in the City has increased by 0.9 percent annually.

TABLE 3.9 -2: HOUSING UNIT GROWTH

YEAR	HOUSING UNITS	ANNUAL AVERAGE CHANGE
2000	24,310	--
2010	50,634	10.8%
2013	51,973	0.9%

SOURCE: CITY OF ELK GROVE 2002; US CENSUS 2010; CALIFORNIA DEPARTMENT OF FINANCE, 2013

PERSONS PER DWELLING UNIT

The average number of persons residing in a dwelling unit in the City is 3.22 (Department of Finance 2013).

VACANCY RATE

The vacancy rate of housing units in the City is 5.3% (Department of Finance 2013).

GROWTH PROJECTIONS

As part of the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), the Sacramento Area Council of Governments (SACOG) has identified growth projections through 2035 for the Sacramento region. SACOG's projections are for the SACOG region as a whole and are not allotted or distributed by sub-regions. As shown in Table 3.9-3, SACOG projects the regional population to rise to 871,169 residents by 2035, a 39.3 percent increase over 27 years. By comparison, SACOG anticipates the number of households to increase by 34.3%.

TABLE 3.9-3: GROWTH PROJECTIONS – SACOG REGION

	YEAR		
	2008	2035	% INCREASE
Population	2,215,044	3,086,213	39.3%
Households	884,725	1,187,744	34.3%

SOURCE: SACOG 2012, TABLE 3.1.

3.9.2 REGULATORY SETTING

STATE

Regional Housing Needs Plan

California General Plan law requires each city and county to have land zoned to accommodate a fair share of the regional housing need. The state determines the fair-share allocated to each region in the state. The share is known as the Regional Housing Needs Allocation (RHNA). The RHNA for the Sacramento region is based on a Regional Housing Needs Plan (RHNP) developed by the local council of government. SACOG is the lead agency for developing the RHNP for a six-county area that includes Sacramento County and the City of Elk Grove. The Housing Element is required to accommodate the City's fair share of the RHNA that covers the period from January 1, 2013 through October 31, 2021. The City's allocation consists of 7,402 units (2,035 very low, 1,427 low, 1,377 moderate, and 2,563 above moderate income). The City is not required to make development occur; however, the City must facilitate housing production by ensuring that land is available and that unnecessary development constraints have been removed.

Metropolitan Transportation Plan/Sustainable Communities Strategy

On April 19, 2012, SACOG adopted its MTP/SCS. The MTP/SCS is a long-range plan for transportation in the region built on the land use Blueprint prepared by SACOG. SACOG is required by federal law to update the MTP at least every four years.

The MTP/SCS, as provided for in SB 375, provides for CEQA incentives whereby, among other things, the CEQA analysis of greenhouse gas emissions for passenger vehicles can be avoided if a project is consistent with the MTP/SCS map. The MTP/SCS recognizes and protects local land use authority and does not preclude a local jurisdiction from planning and approving growth that is different in terms of total units or geographic extent.

The MTP/SCS identifies the general location of land uses, residential densities, and building intensities within the region; identifies areas within the region sufficient to house all the population of the region; identifies areas within the region sufficient to house an eight-year projection of the regional housing need; identifies a transportation network to serve the regional transportation needs; considers the best practically available scientific information regarding resource areas and farmland in the region; considers the state housing goals; sets forth a forecasted development pattern for the region; and provides for the MTP/SCS compliance with the federal Clean Air Act.

LOCAL

City of Elk Grove General Plan

The City of Elk Grove General Plan contains the following policies that are relevant to population and housing aspects of the Project:

H-1 Policy: Maintain an adequate supply of appropriately zoned land with available or planned public services and infrastructure to accommodate the City's projected housing needs for all income levels and for special needs groups. The acreage of appropriately zoned land needed to meet housing needs will be updated annually, based on construction of housing units (tallied by income group and special needs group) and loss of sites through rezoning, in accordance with Action 10.

H-4 Policy: Facilitate and encourage the construction of housing affordable to extremely low-, very low-, low-, and moderate-income households that is consistent with the City's identified housing needs.

3.9.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Based on the standards established by Appendix G of the CEQA Guidelines, the Project will have a significant impact on population and housing if it will induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

The NOP identified that the Project would not displace significant numbers of persons or housing units; this issue will not be discussed further.

IMPACTS AND MITIGATION MEASURES

Impact 3.9-1: The Project would not induce substantial population growth. (less than significant)

A main objective of the Housing Element is to meet the City's housing needs, including accommodating a variety of housing types and densities. Chapter 2.0, Project Description, identifies the proposed actions that would assist the City in addressing its housing needs. Implementation of the Housing Element and development of new housing in Elk Grove would for the most part be in or adjacent urbanized areas and would occur on properties that are currently designated in the General Plan for urbanization. Many of the programs in the Housing Element will not induce substantial population growth, including programs including programs that commit the City to considering or monitoring various housing related issues, but do not require any specific action (H-8 Action 2, H-11 Action 2, H-13 Action 4, H-14 Action 1, and H-15 Action 1), programs for continued implementation of adopted or existing standards, regulations, and programs (H-2 Action 1, H-3 Action 1, H-4 Actions 1 and 3, H-5 Action 1, H-7 Actions 1 and 3, H-9 Action 1, H-11 Action 1, H-12 Action 1, and H-17 Action 1), programs involving City processing of housing projects (H-3 Action 2, H-4 Action 2, H-10 Actions 1 through 3), programs involving coordination with various agencies, organizations, residents, and property owners (H-5 Action 2, H-7 Action 2, H-13 Actions 1 through 3, H-14 Action 1, and H-17 Action 2), and programs involving outreach and the dissemination of information regarding housing-related issues (H-6 Actions 1 and 2, H-8 Action 1, and H-16 Action 1).

While H-1 Action 2 requires high-density residential development within the Southeast Policy Area, no specific sites within the Southeast Policy Area are identified for a change in land use designation or zoning as part of the Project. A separate planning process is underway to develop a strategic plan for the development of the entire 1,200-acre Southeast Policy Area.

Housing Element program H-1 Action 1 requires the City to maintain its inventory of adequate sites to accommodate the RHNA. As described in Chapter 2.0, the City does not have adequate sites to accommodate its lower income allocation. Table 2.0-1 in Chapter 2.0 identifies the opportunity sites considered for General Plan land use and zoning changes to allow high-density residential development.

While no specific development projects are proposed at this time, subsequent multi-family development on any or all of the opportunity sites would represent an increase in the population growth on these sites that was anticipated in the General Plan and analyzed in the General Plan EIR. While Sites 2, 3, 4, 5, 6, 7A, C-12, C-13, C-14, C-18, C-19, C-20, C-25, C-33, C-34, C-36, and C-39 are designated to allow high density residential development and would allow multi-family uses under the adopted General Plan land use designations, the change to the zoning on these sites would allow additional multi-family units in comparison to the current zoning. Site C-1 is designated for medium density residential use. Sites C-21 through C-23, C-26, C-32, and C-40 are designated for low density residential uses. Sites C-15 through C-17 are designated for estate residential uses. Sites C-2, C-8, C-9, and C-41 are designated for rural residential use. Sites C-6, C-24, C-28 through C-31, C-35, and C-37 are designated for commercial use. Sites C-7 and C-27 are designated for light industrial uses. The Project as discussed herein does not require the new construction or expansion of existing roadway infrastructure (e.g., new roads); however, infrastructure improvements to provide utilities to the opportunity sites would be necessary. However, improvements would be limited to those necessary to serve subsequent projects and

the Project would not encourage additional infrastructure or public services that would accommodate additional population growth beyond the growth disclosed herein.

The increase in development density and intensity on these opportunity sites could result in impacts associated with population growth. Table 3.9-4 shows the projected population increase as a result of development of the opportunity sites. In 2013, the City had a population of 159,074 and 51,973 dwelling units. The Project would accommodate 8,843 dwelling units, which would result in approximately 60,816 dwelling units in the City and a population of approximately 187,527 (based on 3.22 persons per household). This would result in an increase of approximately 18% in both population and dwelling units. This increase results in up to approximately 4,875 more dwelling units and 15,680 more persons in comparison to the development and population growth that could occur under the adopted General Plan.

TABLE 3.9-4: POTENTIAL HOUSING UNITS AND POPULATION

SITE	ADOPTED GENERAL PLAN LAND USE DESIGNATIONS: DWELLING UNITS	PROJECT: PROPOSED LAND USE DESIGNATIONS: DWELLING UNITS	DIFFERENCE	
			DWELLING UNITS	POPULATION
2	248	310	62	199
3	280	350	70	225
4	144	240	96	309
5	230	288	58	186
6	300	375	75	241
7A	58	218	160	515
C-1	130	217	87	280
C-2	3	163	160	515
C-6	0	174	174	560
C-7	0	139	139	447
C-8	44	158	114	367
C-9	40	199	159	511
C-10	0	187	187	602
C-12	1,500	1,500	0	0
C-13	98	98	0	0
C-14	98	98	0	0
C-15	12	74	62	199
C-16	13	84	71	228
C-17	11	67	56	180
C-18	190	238	48	154
C-19	18	23	5	16
C-20	32	40	8	25
C-21	1	110	109	350
C-22	3	315	312	1004
C-23	4	456	452	1455
C-24	2	407	405	1304
C-25	68	85	17	54
C-26	0	130	130	418

C-27	0	235	235	756
C-28	0	66	66	212
C-29	0	50	50	161
C-30	0	73	73	235
C-31	0	75	75	241
C-32	2	80	78	251
C-33	196	245	49	157
C-34	163	204	41	132
C-35	0	94	94	302
C-36	0	74	74	238
C-37	0	109	109	350
C-39	0	161	161	518
C-40	72	259	187	602
C-41	8	375	367	1181
TOTAL	**3,968**	**8,843**	**4,875**	**15,680**

As previously described, SACOG has determined that the City has a RHNA of 7,402 housing units for the 2013-2021 planning period. Based on this RHNA, the Housing Element identified potential sites for new housing. The General Plan Land Use Map identifies the ultimate vision for development as well as open space preservation for the City, beyond the RHNA planning period. The opportunity sites identified to accommodate the City's state-mandated housing need and associated population growth would result in a slightly higher growth rate than was anticipated in the long-term regional population projections used to develop the MTP/SCS. The Project would result in a total population of 187,527 and 60,816 housing units at buildout. Applying the MTP/SCS projected regional growth rates to the City's 2008 population results in a population of 194,382 and 63,689 housing units in 2035. While the growth related to the Project is within the MTP/SCS regional growth rates, it is noted that the MTP/SCS does not provide projections for each city and county in the SACOG region. The MPT/SCS focuses growth in the cities and developed areas which indicates that those areas may result in higher growth rates than unincorporated areas, which would result in an increase in the City's growth potential under the MTP/SCS rather than the allocation of the average regional growth rate. Further, the MTP/SCS does not preclude a local jurisdiction from planning and approving growth that is different in terms of total units or geographic extent, the potential for growth in excess of the projections used to develop the MTP/SCS means that the Project could exceed regional population projections that are used to plan for growth, including the development of transportation and air quality plans. The City's General Plan does not include any policies or regulations that restrict population growth, nor does the City have any other policies or regulations that restrict population growth. Therefore, this impact is considered **less than significant**.

This section describes and evaluates potential impacts associated with the Project on police protection, fire protection and emergency response services, parks and recreation, schools, and other public facilities.

The information in this section is derived from the *Cosumnes Community Services District Strategic Plan 2008-2013* (CCSD 2008), *Parks and Recreation Master Plan, Summary Report* (CCSD 2009), Cosumnes Community Services District Fire website, Cosumnes Community Services District Park website, *Cosumnes Community Services District 2012 – 2013 Final Budget* (CCSD 2013a), *Cosumnes Community Services District Monthly Fire Report December 2012* (CCSD 2013b), *City of Elk Grove General Plan* (City of Elk Grove 2003a), *City of Elk Grove General Plan, Volume 1: Draft Environmental Impact Report, SCH #: 2002062082* (City of Elk Grove. 2003b), *City of Elk Grove Annual Budget 2012-2013* (City of Elk Grove 2012), *City of Elk Grove 2013 Development Related Fees* (City of Elk Grove 2013), the Elk Grove Police Department website, the Elk Grove Unified School District (EGUSD) website and the Elk Grove Unified School District *School Facilities Need Analysis* (EGUSD 2013b).

Comments received in response to the NOP identified concerns regarding overcrowding of schools and public safety. The comments are located in Appendix A.

3.10.1 EXISTING CONDITIONS

POLICE PROTECTION

The City operates its own police force (the Elk Grove Police Department, or EGPD), whose service boundaries are contiguous with the City limits. The EGPD provides law enforcement services including responding to crime-related events, handling traffic-related issues, and providing community services to the citizens of Elk Grove. Traffic accidents occurring on freeways that pass through Elk Grove (SR 99 and I-5) are handled by the California Highway Patrol (CHP).

The EGPD provides the full range of public safety services for the City. The Police Department operates out of three facilities. The Police Department's main building is a 12,500-square-foot facility located in the City Hall complex at 8380 Laguna Palms Way. This facility accommodates the administrative functions of the Department, including administration, detectives, and K-9 divisions. A 31,000-square-foot facility located at 8400 Laguna Palms Way houses records, property and evidence, communications, professional standards, traffic, information technology, and fleet services. An approximately 8,069-square-foot facility located at 10190 Iron Rock Way serves as a staging area for the Police Department's fleet and provides shower facilities and equipment storage for sworn personnel.

EGPD has 207 staff positions including 130 sworn police officers, including the police chief, captains, lieutenants, sergeants, and detectives, and 77 non-sworn management, administrative and technical positions (EGPD, 2013). The City's ratio of sworn officers per 1,000 population was 0.82 (130 sworn personnel:159,074 persons) in 2013. EGPD has four divisions: Administrative Services, Field Services, Investigative Services, and Support Services. Field Services is the largest division; Patrol is the largest component of the Field Services Division with 3 lieutenants, 9 sergeants, 53 patrol officers, 6 K-9 officers, and 10 community services officers.

The Elk Grove Communications Center answers an average of 186,000 emergency and non-emergency calls annually. In 2012, 96,242 calls for service were received. Patrol personnel handle

calls for service from residents, businesses and visitors. The current average response time for priority calls is 5.8 minutes (City of Elk Grove, 2012). The Elk Grove Police Department's response time to non-emergency call depends on the seriousness (or priority) of the situation, the likelihood of making an arrest at the scene and the availability of an officer. Response times are the longest for so-called "cold crimes" like home burglaries where the suspect has fled, no suspect information exists, and the victim is in no further danger (Elk Grove Police Department, 2011).

Table 3.10-1 summarizes the number and type of crimes that have occurred from 2006 through 2010 in Elk Grove.

TABLE 3.10-1: ELK GROVE POLICE DEPARTMENT CRIME STATS (2006-2010)

CATEGORY/CRIME	*2006*	*2007*	*2008*	*2009*	*2010*
Violent Crimes	197	505	660	608	529
Willful Homicide	1	2		4	2
Forcible Rape	16	23	22	15	14
Robbery	65	154	149	152	108
Aggravated Assault	115	326	489	437	405
Property Crimes	1,188	2,274	1,966	2,010	1,790
Burglary	398	951	882	859	653
Motor Vehicle Theft	286	546	349	432	343
Larceny-Theft Over $400	504	777	735	719	794
Larceny-Theft	1,142	2,186	2,359	2,152	2,208
Over $400	504	777	735	719	794
$400 and Under	638	1,409	1,624	1,433	1,414
Arson	8	6	12	11	15

SOURCE: CALIFORNIA DEPARTMENT OF JUSTICE. 2013. HTTP://OAG.CA.GOV/CRIME/JT_CISC/2010

FIRE PROTECTION AND EMERGENCY RESPONSE

Fire protection and emergency response services are provided by the Cosumnes Community Services District (CCSD) Fire Department. The CCSD Fire Department services include fire suppression, emergency medical services, technical rescue, arson, and explosion investigations. In November of 2006, a merger between the Elk Grove Community Services District and the Galt Fire Protection District resulted in the creation of the CCSD. This change expanded the delivery of CCSD fire protection and emergency medical services to the cities of Elk Grove and Galt, and unincorporated south County areas—approximately 157 square miles.

Through the merger of the two fire districts and the creation of the CCSD, the total number of fire stations increased from six to eight, plus an administrative building. Six of the fire stations are located in the City. A description of the operational characteristics of the stations is provided below.

Fire Station 71 is located at 8760 Elk Grove Boulevard in Elk Grove. This station maintains one four-person engine, one two-person medic, and one battalion chief.

Fire Station 72 is located at 10035 Atkins Drive in the East Franklin Specific Plan area in Elk Grove. Primary equipment at this station includes one three-person engine and one two-person medic.

Fire Station 73 is located at 9607 Bond Road in Elk Grove. This station provides fire, emergency medical, and ambulance transport services. Primary equipment at this station includes one three-person engine and one two-person medic.

Fire Station 74 is located at 6501 Laguna Park Drive in Elk Grove. This station provides fire, rescue, emergency medical, and ambulance transport services. Primary equipment at this station includes one four-person truck, one three-person engine, and one two-person medic.

Fire Station 75 is located at 2300 Maritime Drive in Elk Grove, approximately 9.5 miles northwest of the Project site. This station provides fire and emergency medical services. Minimum staff at this station includes one three-person engine.

Fire Station 76 is located at 8545 Sheldon Road in Elk Grove. This station provides fire and emergency medical service. Primary equipment located at this station includes one three-person engine.

The CCSD Fire Department is divided into two divisions, the Operations division and the Administration and Support Services division. These two divisions work in concert to provide emergency mitigation and fire prevention services in the region.

The Operations Division provides leadership and evaluation of assigned emergency personnel; responds to various emergencies dispatched throughout the community, including fires, vehicle collisions, hazardous materials spills, medical, and public assistance calls; and manages operation-based programs, including emergency vehicle and equipment acquisition and management.

In 2011, CCSD responded to more than 14,000 calls. The CCSD is staffed with more than 150 sworn personnel and eight engine companies, one ladder truck company, six ambulances, and a command vehicle each day on a 24-hour basis. There are also eight grass engines and other specialty apparatus, including one heavy foam unit, a heavy rescue engine, a technical rescue trailer, a mass decontamination trailer, a mass casualty incident trailer, and a swift water rescue boat, also staffed using these personnel as seasons and emergency circumstances dictate (CCSD, 2013a, p. 4).

The CCSD Fire Department operates three full-time medic units from Fire Stations 73, 74, and 75 in central Elk Grove, Laguna, and east Elk Grove, respectively. The CCSD provides Basic Life Support (BLS) and Advanced Life Support (ALS) and ambulance transport services in the CCSD service boundaries, as well as the nearby communities of Wilton, Herald, and Courtland. All medic units are staffed with one paramedic and an emergency medical technician (EMT). In addition to ambulance units, the EMS Division has a medic bike team that is deployed at large-scale community events to provide rapid medical responses in heavily congested areas (CCSD, 2012a, CCSD, 2012b).

Table 3.10-2 provides statistics on fire calls/service in 2011 and 2012 for the City. The most frequent types of calls for fire services in 2011 are related to medical (74%). Fires represented 4% of all calls in 2012, an increase of 19% from 2011.

TABLE 3.10-2: CCSD ELK GROVE CALL/SERVICE STATISTICS

CALL TYPE	NUMBER OF INCIDENTS				2011-2012 CHANGE
	2011	% OF TOTAL	2012	% OF TOTAL	
Fire	387	3%	459	4%	19%
Medical	8,739	74%	8,865	74%	1%
Special	214	2%	201	2%	-6%
Other	2,494	21%	2,380	20%	-5%
Total	11,825	100%	11,905	100%	1%

SOURCE: CSDD 2013B, P. 2.

Insurance Services Office (ISO) Rating

The ISO rating is the recognized classification for a fire department or district's ability to defend against major fires. According to the ISO, newly developing urban areas should have a fire station opened within 1½ miles of all commercial development and 2½ miles from all residential development when "build-out" exceeds 20% of the planned area. A rating of 10 generally indicates no protection, whereas an ISO rating of 1 indicates high firefighting capability. The City has been given an ISO rating of 3 in areas where a water distribution system and hydrants are in place and an ISO rating of 8 in unwatered areas (City of Elk Grove 2003b, pg 4.12-3).

PARKS AND RECREATION SYSTEM

The CCSD Parks and Recreation Department provides parks and recreation services to the Cities of Elk Grove and Galt. The CCSD plans and designs new parks; owns, operates, and maintains parks and community centers; manages rentals of community centers, picnic sites, and sports fields; and offers recreation programs.

CCSD Park Facilities

Currently, the CCSD manages 92 parks, 18 miles of off-street trails, two community centers, four recreation centers, and two aquatics complexes. According to the CCSD Parks and recreation Master Plan, CCSD had 589.37 acres of parkland in 2012 and will have 880.17 acres by 2018 (CCSD 2009, figure 43). The CCSD provides recreation programs for all ages including special events, preschools, summer camps, teen programs, special interest classes, before- and after-school recreation, non-traditional sports, therapeutic recreation, youth and adult sports, and aquatic programming (CCSD, 2012).

CCSD Community Facilities

The *Barbara Morse Wackford Community and Aquatic Complex* is located next to Laguna Community Park, on the corner of Bruceville Road and Big Horn Blvd. The facility features an aquatics complex, reception and meeting rooms, full court gymnasium, preschool room, teen center, skate park, and lobby.

The Grove is Elk Grove's largest teen recreational facility, offering recreational amenities and programs for students enrolled in grades 7-12. This 2,100-square-foot facility has three large flat screen TVs, gaming consoles, pool tables, foosball tables, a ping pong table, computers to help with homework research, a snack bar, and an outdoor patio.

The *Laguna Town Hall* is a CCSD facility located near I-5 and the Laguna Blvd exit. The facility offers community classes, a preschool, and special events.

The *Jerry Fox Swim Center* is an aquatic center with a 140 foot water slide, a 25 yard pool, and a large, shaded picnic area with barbeques and a dry jungle gym. The facility is open from Memorial Day to Labor Day and hosts a variety of aquatic activities including open recreational swim, swim lessons, pool parties, and special water-based events for families and teens.

The *Castello Recreation Center* is in Castello Park and is used by the Tiny Tot Zone program.

The Pavilion accommodates 200 guests in a dining capacity, and 300 guests theater style. Rental includes set-up and break-down of all the tables and chairs, full access to kitchen facility, outdoor patios, and ample parking.

Strauss Island, home of the popular Strauss Festival, is a beautiful outdoor facility that is available for ceremonies that can accommodate a maximum of 200 guests. Strauss Island includes indoor dressing rooms, chairs, electrical outlets, and nearby parking. Restrooms are approximately 200 yards away.

The *Johnson Recreation Center*, located at 3570 Marsh Point Drive, offers the preschool program "Tiny Tot Station" and the elementary-age before- and after-school Recreation Enrichment Kid Central Station.

The *Elk Grove Recreation Center*, located at 8828 Elk Grove Blvd., hosts several preschool programs including Tiny Tot Friendship Corner, Tiny Tot Kids at Play, Buddy Bunch, and Toddler Time. The California Montessori project is located on site and several Leisure Enrichment Classes are offered at this location.

The *Stephenson Recreation Center* is situated in Stephenson Park and hosts the Tiny Tot Pals preschool program.

SCHOOLS

All of the Housing Element sites fall within the service area of the Elk Grove Unified School District (EGUSD). The District covers nearly 320 square miles and has been in existence for over 41 years. The EGUSD boundaries encompass the entire City, portions of the City of Sacramento, and most of southern Sacramento County. The EGUSD stretches from the Sacramento River to the foothills of Amador County, and is bisected from east to west by the Cosumnes River and north to south by State Route 99 and Interstate 5. Due to constant increases in population, the Elk Grove Unified School District must change its school boundaries on a regular basis.

The Elk Grove Unified School District is the 12th largest school district in California and one of the fastest growing school districts in the nation. More than sixty percent of the District's students are on a four-track year-round schedule and attend school for three months and are off for a month. For the 2012-13 school year, the district will serve more than 62,000 students (EGUSD 2013a). The district has 64 schools: 39 elementary schools, nine middle schools, nine high schools, four alternative education schools, an adult school, a special education school, one virtual academy and one charter school (EGUSD 2013a). The EGUSD adopted an amended Facilities Master Plan in February 2002, which identified major issues and detailed information on the District's future school needs, funding options, and cost estimates.

School Enrollment and Capacity

A School Facilities Needs Analysis was completed for EGUSD in 2013. The study identified that the District's existing school building capacity is 26,339 for grades K-6, 9,547 for grades 7-8, 19,055 for grades 9-12, 975 for SDC Non-severe students and 315 for SDC Severe students.

The study also indentified the existing need for school capacity in the EGUSD, as shown in Table 3.10-3. Table 3.10-3 compares the 2012-13 student enrollment in each grade grouping to the existing school building capacity. As shown the table, facilities capacity exists to accommodate 59 students from new development in grades 7-8, 179 students in grades 9-12 and 789 SDC Non-severe students. As is indicated, the District currently needs additional capacity for 5,782 students in grades K-6 and 1,028 SDC Severe students (EGUSD 2013b, pg. B-4).

TABLE 3.10-3: EGUSD CAPACITY

GRADE LEVEL	FACILITIES CAPACITY	2012-2013 ENROLLMENT	EXCESS/NEED
K-6	26,339	32,121	-5,782
7-8	9,547	9,488	+59
9-12	19,055	18,876	+179
SDC Non-severe	975	186	789
SDC Severe	315	1,343	-1,028

SOURCE: EGUSD 2013B, PG. B-4.

Student Generation Factors

EGUSD plans for school facilities using its Facilities Master Plan. The number, type, and location of school facilities required are based on criteria and standards set forth in the Master Plan. The District selects school sites in accordance with criteria developed by the California Department of Education. The Department of Education must review and approve all sites considered for selection and use by EGUSD. The District uses the student generation rates shown in Table 3.10-4 to determine the projected number of students.

TABLE 3.10-4: STUDENT GENERATION RATES

GRADE LEVEL	SINGLE FAMILY DWELLINGS	MULTIFAMILY DWELLINGS	CONDO UNITS
K-6	0.3812	0.3059	0.1291
7-8	0.1238	0.0782	0.0430
9-12	0.2076	0.1591	0.0762
K-12	0.7126	0.5432	0.2483

SOURCE: EGUSD 2013B, PG. B-3.

Projected Growth

The School Facilities Need Analysis also provides projections for residential development during the next five years are presented in Table 3.10-5. These projections are used by EGUSD to assist in the determination of needed future school facilities. Table 3.10-5 projects that approximately 5,200 single family units, 775 multiple family units and 50 condominium units will be constructed during the next five years. The projections take into consideration current housing market conditions, adopted land use plans and approved development projects.

TABLE 3.10-5: EGUSD PROJECTED RESIDENTIAL DEVELOPMENT

YEAR	*SINGLE FAMILY UNITS*	*MULTIFAMILY UNITS*	*CONDOMINIUM UNITS*	*TOTAL RESIDENTIAL UNITS*
2013-14	1,000	100	0	1,100
2014-15	1,000	250	0	1,250
2015-16	1,025	75	0	1,100
2016-17	1,075	200	0	1,275
2017-18	1,100	150	50	1,300
Total	5,200	775	50	6,025

SOURCE: EGUSD 2013B, PG. B-2

Future School Facilities

The following schools and other facilities have the potential for initial planning or construction within the next five years. For planning purposes, schools are designed well in advance of projected need in order to provide maximum flexibility for changing development within given regions or areas. For elementary schools, a minimum of two to three years for planning and construction is required prior to opening a new school. For high school/middle schools, a minimum of five to six years is required. The following schools/projects have been planned by EGUSD in order to accommodate projected future growth in the District (*EGUSD 2013b, Appendix* B-5):

Elementary Schools
Marion Mix
New C.W. Dillard Elementary
Anatolia II
Laguna Ridge #1
Miwok Village
North Vineyard Station #1
East Elk Grove South
Laguna Ridge #2
North Vineyard Station #2

High School and Middle Schools
High School/Middle School #10 (Vineyard Area)
High School/Middle School #11 (Sunrise Douglas Area)

Alternative High Schools
Alternative #5
Alternative #6

Other Projects
Jesse Baker School Addition
Elk Grove Elementary School Addition
Franklin Elementary School Addition
Student Support Center Addition
Various Classroom Modifications/Additions to Accommodate Growth

OTHER PUBLIC FACILITIES

Libraries

The Elk Grove Library is a part of the Sacramento Public Library (SacLib) system. The Sacramento Public Library serves the greater Sacramento Area. There are a total of 28 library facilities with a collection of two million volumes and an additional access to nine million additional items through the Link+ Service. The Public Library also has 870 public computers and laptops (SacLib 2013).

The Elk Grove Library was established in October 1908 as the first county "free library" in California. Our branch has been housed in several Elk Grove locations, during the past 100 years, until moving to its current site at 8900 Elk Grove Boulevard, which opened December 6, 2008.

The Elk Grove Library has a circulation of approximately 21,000 volumes, 26 Internet & MS workstations, three early learning workstations, and nine online catalog workstations.

City Hall/Offices

The Elk Grove City Hall and city offices are located at 8401 Laguna Palms Way. City departments and offices located in the City Hall complex include:

- City Council
- City Manager
- City Attorney
- City Clerk
- Business License
- Cashiers
    - Transit Passes (e-Tran & RT)
    - Utility Billing (payments & new service)
    - All Payments
    - Animal License
    - Rental & Vacant Housing Registry
- Code Enforcement
- Development Services
    - Planning
    - Public Works
    - Building
- Economic Development
- Garbage Service-Utility Billing
- Human Resources
- Transit Services
- Waste & Recycling

3.10.2 REGULATORY SETTING

STATE

Fire Protection and Emergency Response

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

In accordance with California Code of Regulations Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment" the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all fire fighting and emergency medical equipment.

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could

result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

EMERGENCY RESPONSE/EVACUATION PLANS

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

FIRE PROTECTION

The California Fire Code contains regulations relating to construction and maintenance of buildings and the use of premises. Topics addressed in the Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, industrial processes, and many other general and specialized fire safety requirements for new existing buildings and premises.

UNIFORM FIRE CODE

The Uniform Fire Code with the State of California Amendments contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

CALIFORNIA HEALTH AND SAFETY CODE

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code. This includes regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Parks

QUIMBY ACT

The Quimby Act (California Government Code Section 66477) states that "the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map." Requirements of the Quimby Act apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development. The City collects fees imposed by the park and recreation districts impact fees. The impact fees are collected at the time of building permit and include both capital impacts and land acquisition.

Schools

CALIFORNIA CODE OF REGULATIONS

The California Code of Regulations, Title 7 Planning and Zoning Law, Chapter 4.9. Payment of Fees, Charges, Dedications, or Other Requirements Against a Development Project *Section 65995-65998 (h)* states that the payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995 and, if applicable, any amounts specified in Section 65995.5 or 65995.7 are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073, on the provision of adequate school facilities.

CALIFORNIA DEPARTMENT OF EDUCATION

The California Department of Education (CDE) School Facilities Planning Division (SFPD) prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by the CDE in 2000 to reflect various changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the School Site Analysis and Development Guide. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.

Certain health and safety requirements for school site selection are governed by state regulations and the policies of the SFPD relating to:

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;
- Results of geological studies or soil analyses;
- Traffic and school bus safety issues.

THE KINDERGARTEN-UNIVERSITY PUBLIC EDUCATION FACILITIES BOND ACT OF 2002 (PROP 47)

This act was approved by California voters in November 2002 and provides for a bond issue of $13.05 billion to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds will be targeted at areas of greatest need and must be spent according to strict accountability measures. Funds will also be used to upgrade and build new classrooms in the

California Community Colleges, the California State University, and the University of California in order to provide adequate higher education facilities to accommodate growing student enrollment.

LEROY F. GREENE SCHOOL FACILITIES ACT OF 1998 (SB 50)

The "Leroy F. Greene School Facilities Act of 1998," also known as Senate Bill No. 50 or SB 50 (Chapter 407, Statutes of 1998), governs a school district's authority to levy school impact fees. This comprehensive legislation, together with the $9.2 billion education bond act approved by the voters in November 1998 known as "Proposition 1A", reformed methods of school construction financing in California. SB 50 instituted a new school facility program by which school districts can apply for state construction and modernization funds. It imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development and provided the authority for school districts to levy fees at three different levels:

- Level I fees are the current statutory fees allowed under Education Code 17620. This code section provides the basic authority for school districts to levy a fee against residential and commercial construction for the purpose of funding school construction or reconstruction of facilities. These fees vary by district for residential construction and commercial construction and are increased biannually.

- Level II fees are outlined in Government Code Section 65995.5, allowing school districts to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multi-track year-round scheduling, having an assumed debt equal to 15–30 percent of the district's bonding capacity (percentage is based on revenue sources for repayment), having at least 20 percent of the district's teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past four years which received at least 50 percent plus one of the votes cast. A Facility Needs Assessment must demonstrate the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years.

Level III fees are outlined in Government Code Section 65995.7. If State funding becomes unavailable, this code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives State funding, this excess fee may be reimbursed to the developers or subtracted from the amount of state funding.

LOCAL

City of Elk Grove General Plan

The General Plan contains the following goals and policies that are relevant to public services:

Public Facilities

Policy PF-21 New development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law.

Policy PF-15 The City shall cooperate with the County of Sacramento in the planning and implementation of future library facilities and facility expansions in Elk Grove.

Police Protection

Policy PF-1 Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

Policy SA-30 Design neighborhoods and buildings in a manner that prevents crime and provides security and safety for people and property when feasible.

Policy SA-31: Encourage the use of Crime Prevention Through Environmental Design (CPTED) principles in the design of development projects and buildings. These basic principles include:

- Natural Surveillance: A design concept directed primarily at keeping intruders easily observable. Promoted by features that maximize visibility of people, parking areas and building entrances: doors and windows that look out on to streets and parking areas; pedestrian friendly sidewalks and streets; front porches; adequate nighttime lighting.
- Territorial Reinforcement: Physical design can create or extend a sphere of influence. Users then develop a sense of territorial control while potential offenders, perceiving this control, are discouraged. Promoted by features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments, and 'CPTED" fences.
- Natural Access Control: A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating in offenders a perception of risk. Gained by designing streets, sidewalks, building entrances and neighborhood gateways to clearly indicate public routes and discouraging access to private areas with structural elements.
- Target Hardening: Accomplished by features that prohibit entry or access: window locks, dead bolts for doors, interior door hinges.

Fire Protection

Policy PF-1 Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

Policy PF-2 The City shall coordinate with outside service agencies—including water and sewer providers, the Elk Grove Community Services District, and the Elk Grove Unified School District --during the review of plans and development projects.

Policy PF-7 The City shall require that water flow and pressure be provided at sufficient levels to meet domestic, commercial, industrial, and firefighting needs.

Policy PF-19 Public facilities should be phased in a logical manner which avoids "leapfrog" development and encourages the orderly development of roadways, water and sewer, and other public facilities. The City shall not provide public financing or assistance for projects that do not comply with the planned phasing of public facilities. Interim facilities may be used only if specifically approved by the City Council.

Policy PF-21 New development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law.

Policy SA-28 Cooperate with the Elk Grove Community Services District (EGCSD) Fire Department to reduce fire hazards, assist in fire suppression, and promote fire safety in Elk Grove.

SA-28-Action 1 Review new development for adequate water supply and pressure, fire hydrants, and access to structures by fire fighting equipment and personnel.

SA-28-Action 2 Review projects for compliance with the Fire Code as part of the building permit process.

SA-28-Action 4 Require, where appropriate, on-site fire suppression systems for all new commercial and industrial development to reduce the dependence on fire department equipment and personnel.

Policy SA-32 Cooperate with the Elk Grove Community Services District (EGCSD) Fire Department to reduce fire hazards, assist in fire suppression, and promote fire safety in Elk Grove.

Parks, Trails, and Open Space

Policy PTO-1 The City of Elk Grove supports the development, maintenance, and enhancement of parks and trails serving a variety of needs at the neighborhood, area, and citywide level. The City may seek to accomplish the provision of parks and trails in cooperation with the Elk Grove Community Services District.

Policy PTO-3 Funding for maintenance of parks and/or trails shall be assured to the City's satisfaction prior to the approval of any Final Subdivision Map which contains or contributes to the need for a public parks and facilities.

Policy PTO-4 New residential developments may be required to, at a minimum, provide parks consistent with the Quimby Act (CA Govt. Code Section 66477), through land dedication, fees in lieu, or on-site improvements at a standard of five (5) acres of land for parks per 1,000 residents. Land dedication and/or payment of in-lieu fees shall be required consistent with state law. Land dedication and/or fees may be required pursuant to other policies in this Element with or without the use of the authority provided in the Quimby Act, or in combination with the Quimby Act and other legal authority.

Policy PTO-7 The trails system in Elk Grove should provide for connectivity, so that all trails are linked to the extent possible for greater use as recreational and travel routes. The following features should be included in the trails system in Elk Grove:

- Trails should link residential areas with parks, commercial and office areas, and other destinations.
- Trails along major roadways should avoid meanders or other design features which make bicycle use less convenient or safe.
- Trails should be located off-street to the extent possible.
- Easements such as access roads should be placed in joint use as trails.

Policy PTO-8 The City's desired trails system is shown in Figure PTO-2. Flexibility shall be considered when making decisions on specific trail locations within projects, so long as the trails shown in figure PTO-2 are implemented and other policies (such as connectivity) are incorporated in the trails system.

Policy PTO-9 Funding for maintenance of City trails shall be assured prior to the approval of any project which contains a City owned trail.

Policy PTO-11 Trails which parallel streams should be primarily located beyond the riparian corridor and wetlands to minimize wildlife impacts and shall be restricted to non-motorized traffic.

Policy PTO-12 Trails should be designed with the safety of users and adjacent property owners in mind. To the extent possible, the bicycle trails system should provide safe, off-street options suitable for use by children and less-experienced riders.

Policy PTO-13 Recreational trails should not be placed adjacent to or on farmland if feasible alternative routes exist elsewhere in the vicinity. However, if no other feasible routes exist, trail facilities should be designed in cooperation with adjacent property owners to minimize adverse impacts on farming practices.

SCHOOLS

Policy PF-16 Specific plans shall identify all existing and planned school sites and should include guidelines and conceptual examples for incorporating new schools into overall neighborhood design.

Policy PF-18 The City supports state legislative efforts to secure additional state funding for school construction and ensure maintenance of local district priorities for funds in the state school bond program.

Policy PF-23 The City will coordinate with independent public service providers, including schools, parks and recreation, reclamation, water, transit, electric and other service districts, in developing financial and service planning strategies.

City of Elk Grove Municipal Code

CHAPTER 22.40. PARK AND RECREATION DEDICATION AND FEES

Chapter 22.40 establishes parks and recreation dedication and fee requirements for development projects. As is stated, as a condition of approval of a tentative subdivision map or tentative parcel map, the subdivider shall dedicate land, pay a fee in lieu thereof, or both, at the option of the City for neighborhood and community park or recreational purposes at the time specified by the City according to the standards and formula contained in this chapter.

3.10.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on public services if it would:

- Result in substantial adverse physical impacts associated with the provisions of new or physically altered government facilities, and/or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:
    - Fire Protection,
    - Police Protection, or
    - Schools, or
    - Parks, or
    - Other public facilities, and/or
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

IMPACTS AND MITIGATION MEASURES

Impact 3.10-1: Project implementation would not have significant effects on police facilities. (less than significant)

Implementation of the proposed Housing Element does not, in and of itself, construct new housing in the City. However, the proposed Housing Element does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Housing Element would result in changing General Plan land use designations and/or rezoning up to 42 sites in the City. The Housing Element would change allowed land uses on 353.5 acres in order to accommodate up to 8,843 multi-family residential units. In comparison, using the existing General Plan land use designations for these 42 sites would allow for the development of 3,968 housing units (based on the maximum number of units per acre per land use designation). Implementation of the Housing Element would increase the number of dwelling units in the City by 4,875 over those identified in the General Plan. This increase of 4,875 housing units would result in a potential population increase in the City of 15,680 persons when compared to the adopted General Plan (see Table 3.9-4).

The service standard for the Elk Grove Police Department is one officer per 1,000 people. Implementation of the Housing Element would result in an increased demand of up to 15.7 sworn officers. The addition of up to 15.7 officers would not require the Police Department to expand the existing facilities or construct new facilities. The 42 sites identified in the Housing Element are

within the existing EGPD service area boundary, and would not require the construction of new police facilities to serve the areas that may be developed as a result of implementation of the Housing Element.

The General Plan Draft EIR anticipated urbanization of the City and identified that implementation of the General Plan would result in a less than significant impact to police services with implementation of mitigating General Plan policies and actions, SA-30, and SA-31 related to provision of police and public safety services (Impact 4.12.1.2; City of Elk Grove, 2003b, pp. 4.12-14 through 4.12-16). The Project is consistent with General Plan policies related to public safety services.

Elk Grove General Plan Policy SA-30 requires development to design neighborhoods and buildings in a manner that prevents crime and provides security and safety for people and property when feasible. Policy SA-31 encourages the use of Crime Prevention Through Environmental Design (CPTED) principles in the design of development projects and buildings. All development projects in the City are required to undergo the City's development review process. Part of this process is a review of projects by the EGPD and, where necessary, EGPD recommends changes to a project. Policy PF-21 requires that new development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law. As a part of the City's Capital Facilities Fee Program, the City collects police facility impact fees from new development at a rate of $446 per single family dwelling and $294 for multifamily dwelling units (City of Elk Grove 2013 Capital Facilities Fee Program, pg. 14). Payment of the applicable impact fees by the future projects developed consistent with the Housing Element would assist in offsetting any fiscal impacts to police services.

The fiscal impacts that a project may pose to a city is not an environmental impact. Nor is the necessity of additional officers to serve a project. Environmental impacts would occur if "substantial adverse physical impacts associated with the provisions of new or physically altered government facilities, and/or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for police services". The Housing Element, in and of itself, does not construct new housing nor does it propose any policies that would impact police protection in the City. Indirect housing development that may be constructed as a result of Housing Element implementation may result in a potential need for up to 15.7 additional Elk Grove police officers. The addition of these new officers would not require a new or expanded police facility. Therefore, the Project would have a **less than significant** impact related to police services and facilities.

Impact 3.10-2: Implementation of the Project would not have a significant effect on fire protection services or facilities. (less than significant)

Implementation of the proposed Housing Element does not, in and of itself, construct new housing in the City. However, the proposed Housing Element does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Housing Element would result in changing the General Plan land use designations and/or zoning of up to 42 sites in the City. The Housing Element would change allowed land uses on up to 353.5 acres in order to accommodate up to approximately 8,843 multi-family residential units. In comparison, using the existing General Plan land use designations for these 42 sites would allow for the development of 3,968 housing units (based on the maximum number of units per acre per land use designation). Implementation of the Housing Element would increase the number of dwelling units in the City by up to 4,875 over those identified in the General Plan. This increase of 4,875 housing units would result in a potential *population* increase in the City of 15,680 persons when compared to the adopted General Plan (see Table 3.9-4).

The increase in development density and intensity on these 42 sites result in impacts to facilities associated with fire protection not discussed in previous General Plan environmental documents.

The CCSD Fire Department has established a goal for emergency response units from the Fire Department to arrive on-scene in urban areas of the CCSD within five minutes of initial dispatch, 70% of the time, and up to six minutes of initial dispatch, 90% of the time. In rural areas, the goal is for the Fire Department to arrive on-scene within twelve minutes of initial dispatch, 90% of the time." (CCSD 2008, p. 19). The CCSD Fire Department currently operates six fire stations in the City.

The General Plan Draft EIR anticipated urbanization of the City and identified that implementation of the General Plan would result in a less than significant impact associated with provision of fire protection and emergency medical services with implementation of the EGSCD (now CCSD) Master Plan and mitigating General Plan policies and actions including Policies PF-1, PF-2, PF-7, PF-19, PF-20, PF-21, and SA-28 and associated *implementing actions* (Impact 4.12.1. City of Elk Grove, 2003b, pp. 4.12-7 through 4.12-9). The 2013 Housing Element Update is consistent with the General Plan policies and implementing actions, to the extent that these policies apply to fire protection in the City.

General Plan Policy PF-7 and SA-28 Action 1 require adequate water flow and pressure. Policy SA-32 requires the cooperation with the Elk Grove Community Services District (EGCSD) Fire Department (now CCSD Fire Department) to reduce fire hazards, assist in fire suppression, and promote fire safety in Elk Grove and Policy PF-2 requires coordination with outside agencies. All residential projects in the City are required to undergo the City's development review process which includes CCSD Fire Department review. CCSD standard comments include fire sprinkler specifications, emergency vehicle turnaround requirements, minimum fire flow requirements, requirement for installation of various infrastructure, and requirements for the wetlands/open space areas. The CCSD also identifies project-specific requirements regarding the street names/addressing, street layout, and requirement for funding a portion of the CCSD's on-going fire

and emergency services. All development projects would be required to comply with the CCSD's requirements prior to issuance of a Fire Permit by the CCSD. Policy PF-21 requires that new development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law. As a part of the City's Fire Fee, the City collects impact fees from new development. Payment of the applicable impact fees by future projects allowed under the Housing Element would assist in offsetting any fiscal impacts to fire services.

All future housing sites identified in the Housing Element are within the City boundaries and CCSD fire district service area. All potential housing sites would be served by an existing or planned fire station. General Plan policies assure that if new fire facilities are needed due to future residential development, these facilities have been planned for and funding is available. Therefore, impacts to the provision of fire and emergency medical services as a result of Housing Element implementation are considered **less than significant**.

Impact 3.10-3: Implementation of the Project would not have a significant effect on parks and recreational facilities. (less than significant)

As is shown in Table 2.0-2 of Section 2.0 Project Description, implementation of the Housing Element would result in the changing the General Plan land use designations and/or zoning of up to 42 sites in the City. The Housing Element would change allowed land uses on 353.5 acres in order to accommodate up to approximately 8,843 multi-family residential units. In comparison, using the existing General Plan land use designations for these 42 sites would allow for the development of 3,968 housing units (based on the maximum number of units per acre per land use designation). Implementation of the Housing Element would increase the number of dwelling units in the City by 4,875 over those identified in the General Plan. This increase of 4,875 housing units would result in a potential population increase in the City of 15,680 persons when compared to the adopted General Plan (see Table 3.9-4).

The increase in development density and intensity on these 42 sites could result in impacts to parks and recreation facilities not discussed in previous General Plan environmental documents.

General Plan Policy PTO-4 states that new residential developments may be required to, at a minimum, provide parks consistent with the Quimby Act (CA Govt. Code Section 66477), through land dedication, fees in lieu, or on-site improvements at a standard of five (5) acres of land for parks per 1,000 residents. Additionally, Policy PTO-15 exemplifies the City's desire to preserve open space lands in the region, and supports the establishment of multipurpose open space areas.

The future development potential of the 42 sites would result in an increase of approximately 4,875 more dwelling units than were anticipated in the existing General Plan. Based on an average household size of 3.2 persons per household, the increase of housing units would result in an increase of 15,680 persons in the City when compared to the existing General Plan. Based on the existing parkland to population standard, if all of these housing units were to develop as projected in the Housing Element, this would result in an additional 78.4 acres of parkland demand.

The Elk Grove General Plan has many policies designed to create and protect parkland and recreational facilities in the City. Policy PTO-1 supports the development, maintenance, and enhancement of parks and trails serving a variety of needs at the neighborhood, area, and Citywide level. Policy PTO-3 requires that funding for maintenance of parks and/or trails be assured prior to the approval of any Final Subdivision Map which contains or contributes to the

need for a public parks and facilities. Policy PTO-4 requires new residential developments to, at a minimum, provide parks consistent with the Quimby Act (CA Govt. Code Section 66477), through land dedication, fees in lieu, or on-site improvements at a standard of five (5) acres of land for parks per 1,000 residents. Policy PTO-7 discusses the trails system in Elk Grove so that all trails are linked to the extent possible for greater use as recreational and travel routes. Policy PTO-9 requires that funding for the maintenance of City trails be assured prior to the approval of any project which contains a City-owned trail. All new residential development would be required to comply with the above General Plan policies and therefore lessen the potential for impacts to City parks and recreational facilities.

The City has park development impact fees for six areas, identified in Table 3.10-6 below.

TABLE 3.10-6: PARK DEVELOPMENT IMPACT FEES

LAND USE TYPE	*STONE LAKE*	*LAKESIDE*	*LAGUNA WEST*	*EAST FRANKLIN*	*EASTERN ELK GROVE*	*LAGUNA RIDGE*[1]
Single Family	$2,708/du	$247/du plus $20 per permit	$169/du plus $20 per permit	$7,146/du	$5,716/du	$3,002/du
Multifamily	$31,662/ac	$124/du plus $20 per permit	$85/du plus $20 per permit	$4,765/du	$3,812/du	$2,001/du
Age restricted	-	-	-	$4,084/du	$3,716/du	$1,718/du

SOURCE: CITY OF ELK GROVE 2013 DEVELOPMENT RELATED FEES

Note: 1) The Laguna Ridge Specific Plan also has a Supplemental Park Fee Program: Zone 1; single family $10,150/du, multifamily $6,768/du, and age restricted $5,801/du. Zone 2; single family $8,519/du, multifamily $5,680/du, and age restricted $4,868/du.

Any future housing that is constructed as a result of Housing Element implementation would be required to adhere to the parkland and recreation facilities requirements of the City. The Housing Element does not propose any policies or programs that would remove these requirements. The City has regulations in place that require the payment of a fee or parkland dedication for all new residential units. While implementation of the Housing Element may result in development of up to approximately 4,875 units not previously considered in the General Plan, any housing developed as a result of the Housing Element is subject to these regulations. The Elk Grove General Plan has policies that protect the existing parkland and recreational facilities and promotes further development of these facilities. The Elk Grove General Plan EIR identifies that implementation of Policies PRO-1 through PRO-11 and PRO-14 and associated actions, which would apply to the Project and subsequent development, would reduce potential park impacts to less than significant. For these reasons, the Project's impact to park and recreational facilities is considered **less than significant**.

Impact 3.10-4: Implementation of the Project would not have a significant effect on schools. (less than significant)

As stated previously, implementation of the Housing Element would result in the changing of General Plan land use designations or a rezoning of 42 sites in the City. The Housing Element would change allowed land uses on 353.5 acres in order to accommodate up to 8,843 multi-family residential units. In comparison, using the existing General Plan land use designations for these 42 sites would allow for the development of 3,968 housing units (based on the maximum number of units per acre per land use designation). Implementation of the Housing Element would increase

the number of dwelling units in the City by 4,875 over those identified in the General Plan. This increase of 4,875 housing units would result in a potential population increase in the City of 15,680 persons when compared to the adopted General Plan (see Table 3.9-4).

The increase in development density and intensity on these 42 sites result in impacts to school facilities not discussed in previous General Plan environmental documents.

Based on the maximum estimated number of multi-family dwelling units that may be developed on the 42 sites and the student generation factors listed in Table 3.10-4, an estimate of additional student generation as a result of Project implementation can be determined, as shown in Table 3.10-7.

TABLE 3.10- 7: STUDENT POTENTIAL

GRADE LEVEL	*GENERATION FACTOR*	*MULTIFAMILY UNITS*	*TOTAL NEW STUDENTS*
K-6	0.3059	8,843	2,705
7-8	0.0782		692
9-12	0.1591		1,407
K-12	0.5432		4,804

Based on the existing student generation factors, the Project could result in an additional 4,804 students to be educated by the EGUSD. This is an increase in approximately 2,648 students in comparison to the students accommodated on the 42 sites under the adopted General Plan land use designations.

According to the 2013 School Facilities Need Analysis, the current student (2013/14) enrollment exceeds EGUSD capacity for elementary and SDC Severe school facilities. Additionally, the excess capacity in the middle and high school grades would not be able to absorb the projected number of new students residing in the 42 opportunity sites in existing EGUSD facilities. Based on this, new school sites would need to be constructed for future residents of the 42 housing sites. EGUSD has nine elementary schools, two high/middle schools and two alternative high schools planned to accommodate anticipated future growth in the District.

The Elk Grove General Plan includes the following policies to assist in the development of public school facilities. Policy PF-16 requires that specific plans identify all existing and planned school sites and include guidelines and conceptual examples for incorporating new schools into overall neighborhood design. Policy PF-18 states the City's support of state legislative efforts to secure additional state funding for school construction and ensure maintenance of local district priorities for funds in the state school bond program. Policy PF-23 requires the City to coordinate with independent public service providers, including schools, in developing financial and service planning strategies.

The Elk grove General Plan has a number of policies designed to assist in the development of school facilities. Additionally, the EGUSD has impact fees based on the square footage of a new residential unit to assist in the funding of new schools.

In accordance with Section 65995(h) of the California Government Code, the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real

property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073, on the provision of adequate school facilities."

It is acknowledged that several comment letters were received during the NOP comment period that noted school overcrowding issues within the EGUSD. School overcrowding can result in students being enrolled at a school that is different from the local elementary or secondary school serving a particular neighborhood. The EGUSD does not guarantee any student attendance at a particular school, regardless of where the student lives. Further, school boundaries are subject to change periodically as school facilities are constructed and as populations age or otherwise change. While implementation of the Project may contribute to school overcrowding, this is not considered to be a significant impact under CEQA. All new multi-family housing projects that may be developed on the 42 sites identified in the Housing Element would be required to pay all applicable school facilities impact fees. As stated above, the payment of these fees is considered to be full and complete mitigation for school facilities impacts.

For these reasons, implementation of the Housing Element would have a **less than significant** impact related to *school facilities.*

Impact 3.10-5: Implementation of the Project would not have effects on other public facilities. (less than significant)

The Project may increase demand for other public facilities within the City, such as libraries and civic buildings. The Project does not, in and of itself, propose or constrict new housing and as such, would not have a direct impact to public facilities and services in the City. However, as an indirect result, implementation of the Housing Element would facilitate the development of housing in the City. As stated previously, implementation of the Housing Element would result in the changing the General Plan land use designations and/or zoning of up to 42 sites. The increase in development density and intensity on these 42 sites could result in impacts to library and other civic facilities not discussed in previous General Plan environmental documents.

The Elk Grove General Plan has policies that assist in the development of new public facilities. Policy PF-21 requires new development to fund its fair share portion of its impacts to all public facilities and infrastructure and Policy PF-15 identifies the City's desire to provide adequate library facilities by working with the County of Sacramento in the planning and implementation of future library facilities and facility expansions in Elk Grove. Additionally, the City has impact fees for library and civic facilities as part of their Capital Facilities Fee Program.

The Project *would not require* the construction of new public facilities or expansion of facilities as it does not construct new housing. New housing constructed as an *indirect result* of implementation of the Housing Element would be required to pay their fair share for the development of new facilities. The City has a library and civic facility impact fees for new residential development. These fees assist in the maintaining and development of public facilities in the City. For these reasons, the potential for impacts to other public facilities is **less than significant**.

REFERENCES

CCSD 2008. *Cosumnes Community Services District Strategic Plan 2008-2013.* Elk Grove, CA. June 25, 2008.

CCSD 2009. *Parks and Recreation Master Plan, Summary Report.* Elk Grove, CA. September 2009.

CCSD 2012a. Cosumnes Community Services District website. http://www.yourcsd.com/fire/stations.asp. Accessed December 5, 2012.

CCSD 2012b. Cosumnes Community Services District website. http://www.yourcsd.com/fire/. Accessed February 23, 2013.

CCSD 2012b. Cosumnes Community Services District website. http://www.yourcsd.com/parks/. Accessed February 23, 2013.

CCSD 2013a. *Cosumnes Community Services District 2012 – 2013 Final Budget.* Elk Grove, CA. August 15, 2012.

CCSD 2013b. CCSD *Monthly Fire Report December 2012.* Accessed 2/22/2013. http://www.yourcsd.com/board/reports/130116063001brdrep_8.pdf

City of Elk Grove 2003a. *City of Elk Grove General Plan.* Elk Grove, California. August 2003.

City of Elk Grove 2003b. *City of Elk Grove General Plan, Volume 1: Draft Environmental Impact Report, SCH #: 2002062082.* Elk Grove, California. August 2003.

City of Elk Grove 2012. *Annual Budget 2012-2013.* Elk Grove, CA. May 23. 2012.

City of Elk Grove 2013. *2013 Development Related Fees.* January 1, 2013. Elk Grove, CA. Available at : http://www.elkgrovecity.org/finance/pdfs/fee-booklet.pdf.

Elk Grove Police Department 2011. http://www.elkgrovepd.org/more/reporting-non-emergencies.asp. Accessed February 22, 2013.

Elk Grove Police Department. 2012. http://www.elkgrovepd.org/more/staff-directory.asp. Accessed February 22, 2013.

Elk Grove Unified School District (EGUSD). 2013a. EGUSD website. Available at: http://www.egusd.net/index.cfm. Accessed July 2, 2013.

Elk Grove Unified School District (EGUSD). 2013b. *School Facilities Need Analysis.* Odell Planning and Research, Inc. April 2013.

The purpose of this EIR section is to identify environmental impacts related to implementation of the Project, including multimodal circulation and traffic operations, and to recommend mitigation measures to avoid or minimize potentially significant impacts. This section is based on the *Transportation Impact Analysis – Housing Element Update* prepared by Fehr & Peers in October 2013 (Fehr & Peers 2013), which is attached as Appendix C.

3.11.1 ENVIRONMENTAL SETTING

PROJECT LOCATION

The City is generally located in south Sacramento County about 15 miles south of the City of Sacramento. Regional freeway access to the City is provided by Interstate 5 (I-5) and State Route 99 (SR-99). Grant Line Road provides access to regional destinations north and south of the City, including the Cities of Rancho Cordova and Folsom and community of El Dorado Hills. The City is generally served by a network of arterial-level roadways on a one-mile grid with interchanges on SR-99. I-5 has two interchanges that provide direct access to the City.

ROADWAY SYSTEM

Freeways

Freeways serving the Project vicinity include I-5 and SR-99.

- **State Route 99 (SR-99)** is a north-south freeway that provides a connection between all of the major cities in the Central Valley, from Sacramento and Stockton in the north to the cities of Modesto, Merced, Fresno, and Bakersfield in the south. Access to SR-99 is provided through interchanges at Grant Line Road, Elk Grove Boulevard, Laguna Boulevard/Bond Road, and Sheldon Road. This section of SR-99 has two mainline travel lanes and one high occupancy vehicle (HOV) lane in either direction with a posted speed limit of 65 mph.

- **Interstate 5 (I-5)** is a north-south freeway that traverses California and is a major national freeway that connects between Mexico and Canada. Near the Hood Franklin Road interchange, I-5 is a four-lane freeway and transitions to a six-lane freeway north of Laguna Boulevard.

Roadways

The City's roadway system is depicted in Figure 3.11-1, the General Plan circulation diagram which shows the City's existing and planned roadway facilities. A description of the existing condition of the City's main roadways is described below.

- Big Horn Boulevard is a four-lane arterial street extending from Franklin Boulevard to Whitelock Parkway. Big Horn Boulevard is constructed to its General Plan designation.

- Bradshaw Road is a two-lane north-south roadway extending from Folsom Boulevard in Sacramento County to Grant Line Road. Grant line is designated as a six-lane arterial in the General Plan.

- Bruceville Road is a north-south road extending from Valley Hi Drive near the Kaiser–Permanente complex in unincorporated Sacramento County south through Elk Grove into San Joaquin County. Bruceville Road is four lanes between Sheldon Road and Laguna Boulevard, six lanes between Laguna Boulevard and Elk Grove Boulevard, four lanes between Elk Grove Boulevard and Whitelock Parkway, and two lanes south of Whitelock Parkway. Bruceville Road is designated as a six-lane arterial in the General Plan. Bruceville Road between Calvine Road and Bond Road is subject to the Elk Grove Rural Road Improvement Policy.

- Calvine Road is an east-west road extending from SR-99 to Grant Line Road and is the northern edge of Elk Grove. Calvine Road is six lanes from Power-Inn Road to Cliffcrest Drive, transitions to four lanes from Cliffcrest Drive to Vintage Park Drive, and five lanes between Vintage Park Drive and Elk-Grove Florin Road. East of Elk-Grove-Florin Road, Calvine alternates between four, five, and six lanes to Vineyard Road, where it continues as a two-lane road to Grant Line Road. Calvine Road is designated as a six-lane arterial in the General Plan.

- Center Parkway is a roughly north-south road extending west of Bruceville Road to the City limits. Center Parkway is four lanes Hampton Cove Way to Sheldon Road. It is evaluated as a two-lane road in this study. Center Parkway is designated as a six-lane arterial in the General Plan.

- Elk Grove Boulevard is an east-west road extending from I-5 to Grant Line Road. Elk Grove Boulevard is six lanes from I-5 to East Stockton Boulevard, four lanes to Elk Grove-Florin Road, and two lanes to Grant Line Road. Elk Grove Boulevard is constructed to its General Plan designation between I-5 and Waterman Road. Elk Grove Boulevard is designated in the General Plan as a four-lane arterial east of Waterman Road.

- Elk Grove-Florin Road is a north-south arterial extending from Florin Road in Sacramento County to East Stockton Boulevard (near SR-99) in south Elk Grove. Elk Grove-Florin Road has four through lanes from Brittany Park Road to Elk Grove Boulevard and two lanes from Elk Grove Boulevard to East Stockton Boulevard. Elk Grove-Florin Road is designated as a six-lane arterial in the General Plan from Brittany Park Road to Bond Road, as a four lane arterial between Bond Road and Elk Grove Boulevard, and as a two-lane collector south of Elk Grove Boulevard.

- Grant Line Road is traverses Elk Grove in a southwest to northeast direction. Grant Line Road extends from SR-99 through Elk Grove to White Rock Road in Rancho Cordova. Grant Line Road is six lanes between SR-99 and East Stockton Boulevard. East of East Stockton Boulevard, Grant Line Road is two lanes. Grant line Road is designated as an eight lane arterial between SR-99 and Bradshaw Road and as a six lane arterial east of Bradshaw

Road. Grant Line Road between Calvine Road and just east of Equestrian Drive is subject to the Elk Grove Rural Road Improvement Policy. Grant Line Road is also part of the Capital SouthEast Connector project.

- Kammerer Road is an east-west road extending from Bruceville Road to West Stockton Boulevard. Kammerer Road is two lanes from just west of Lent Ranch Parkway to Bruceville Road. Kammerer Road is part of the Capital SouthEast Connector project and is designated in the General Plan as an eight lane arterial from SR-99 to Lent Ranch Parkway and as a six-lane arterial from Lent Ranch Parkway to Franklin Boulevard. The General Plan includes the extension of Kammerer Road from Bruceville Road to Franklin Boulevard.

- Laguna Boulevard is an east-west roadway extending from I-5 to SR-99. Laguna Boulevard is six lanes from I-5 to Big Horn Boulevard and eight lanes between Big Horn Boulevard and Laguna Springs Drive. Laguna Boulevard is constructed to its General Plan designation.

- Sheldon Road is an east-west roadway that extends from Bruceville Road to Grant Line Road. Sheldon Road is four lanes from Bruceville Road to Lewis Stein Road, six lanes from Lewis Stein Road and Power Inn Road, four lanes between Power Inn Road and Elk Grove-Florin Road, and two lanes east of Elk Grove-Florin Road. Sheldon Road is improved to its General Plan designation between Bruceville Road Elk Grove-Florin Road. Sheldon Road is designated as a four-lane arterial between Elk Grove-Florin Road and Bradshaw Road and as a two-lane roadway with expanded right-of-way between Bruceville Road and Grant Line Road. Sheldon Road between Elk Grove-Florin Road and Grant Line Road is subject to the Elk Grove Rural Road Improvement Policy.

- Waterman Road is a north-south roadway that extends from Calvine Road to Grant Line Road in the City. Waterman Road is generally two lanes with widening at improved intersection to accommodate it General Plan designation as a four-lane arterial. The segment of Waterman Road ½ mile north and south of Sheldon Road is subject to the Elk Grove Rural Road Improvement Policy.

STUDY AREA

The study area was selected based on the expected travel characteristics of the Project (i.e., site location), as well as the nearby transportation facilities' susceptibility to Project impacts.

The following 47 roadway segments, including six segments on SR-99 and four segments on I-5, were selected for analysis:

Study Roadways

1. Big Horn Boulevard – Franklin Boulevard to Laguna Boulevard
2. Big Horn Boulevard – Laguna Boulevard to Elk Grove Boulevard
3. Big Horn Boulevard – Elk Grove Boulevard to Kammerer Road
4. Bradshaw Road – Vintage Park Road to Calvine Road
5. Bradshaw Road – Calvine Road to Bond Road

6. Bradshaw Road – Bond Road to Grant Line Road
7. Bruceville Road – Jacinto Road to Sheldon Road
8. Bruceville Road – Sheldon Road to Laguna Boulevard
9. Bruceville Road – Laguna Boulevard to Elk Grove Boulevard
10. Bruceville Road – Elk Grove Boulevard to Bilby Road
11. Calvine Road – Power Inn Road to Elk Grove-Florin Road
12. Calvine Road – Elk Grove-Florin Road to Bradshaw Road
13. Calvine Road – Bradshaw Road to Grant Line Road
14. Center Parkway – Sheldon Road to Jacinto Road
15. Elk Grove Boulevard – I-5 to Franklin Boulevard
16. Elk Grove Boulevard – Franklin Boulevard to Bruceville Road
17. Elk Grove Boulevard – Bruceville Road to Big Horn Boulevard
18. Elk Grove Boulevard – Big Horn Boulevard to East Stockton Boulevard
19. Elk Grove Boulevard – East Stockton Boulevard to Elk Grove-Florin Road
20. Elk Grove Boulevard – Elk Grove-Florin Road to Waterman Road
21. Elk-Grove Florin Road – Vintage Park Road to Calvine Road
22. Elk Grove-Florin Road – Calvine Road to Bond Road
23. Elk Grove-Florin Road – Bond Road to Elk Grove Boulevard
24. Elk Grove-Florin Road – Elk Grove Boulevard to East Stockton Boulevard
25. Grant Line Road – SR99 to East Stockton Boulevard
26. Grant Line Road – East Stockton Boulevard to Bradshaw Road
27. Kammerer – Big Horn Boulevard to Promenade Parkway
28. Laguna Boulevard – I-5 to Franklin Boulevard
29. Laguna Boulevard – Franklin Boulevard to Bruceville Road
30. Laguna Boulevard – Bruceville Road to Big Horn Boulevard
31. Laguna Boulevard – Big Horn Boulevard to East Stockton Boulevard
32. Sheldon Road – Center Parkway to East Stockton Boulevard
33. Sheldon Road – East Stockton Boulevard to Elk Grove-Florin Road
34. Sheldon Road – Elk Grove-Florin Road to Bradshaw Road
35. State Route 99 – Eschinger Road to Grant Line Road
36. State Route 99 – Grant Line Road to Elk Grove Boulevard
37. State Route 99 – Elk Grove Boulevard to Laguna Boulevard
38. State Route 99 – Laguna Boulevard to Sheldon Road
39. State Route 99 – Sheldon Road to Calvine Road

40. State Route 99 – Calvine Road to Stockton Boulevard
41. Waterman – Calvine Road to Vintage Park Road
42. Waterman – Calvine Road to Bond Road
43. Waterman – Bond Road to Grant Line Road
44. Interstate 5 – Twin Cities Road to Hood Franklin Road
45. Interstate 5 – Hood Franklin Road to Elk Grove Boulevard
46. Interstate 5 – Elk Grove Boulevard to Laguna Boulevard
47. Interstate 5 – Laguna Boulevard to Pocket Road

Data Collection and Analysis

To provide a baseline for the transportation analysis, traffic counts collected in late 2012 and early 2013 are used in this analysis. The directional AM and PM peak hour roadway segment traffic counts are based on intersection turning movement traffic counts. Peak hour traffic counts for Interstate 5 (I-5) and State Route 99 (SR 99) are from Caltrans Performance Measurement System (PeMS) and Transportation Systems Network (TSN) database and are also representative of 2012/2013 conditions.

ANALYSIS METHODOLOGY

Analysis methods for roadways are described below.

Roadway Segments

Level of service is a qualitative measure of traffic operating conditions whereby a letter grade, from A to F, is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions.

Roadway segments were analyzed by comparing average peak hour daily traffic volumes to capacity thresholds presented in the City's *Traffic Impact Analysis Guidelines* (July 2000). Consistent with assumptions in the City's General Plan background report, study segments on Elk Grove Boulevard and Grant Line Road were analyzed using thresholds for an arterial roadway with moderate access control.

Consistent with the General Plan transportation analysis, the analysis presented in this report is based on AM and PM peak hour directional traffic volumes to address traffic flow directionality that occurs on some study facilities associated with morning and evening work commute patterns to/from the City of Sacramento. For study roadways, traffic flows are generally higher to freeways and regional connectors in the morning and away from freeways and regional connectors in the evening. All City roadways were analyzed using a capacity of 990 vehicles per hour per lane and all freeways were analyzed using a capacity of 2,200 vehicles per hour per lane. Table 3.11-1 shows level of service (LOS) volume-to-capacity thresholds for study roadways.

TABLE 3.11-1: LEVEL OF SERVICE AND VOLUME-TO-CAPACITY THRESHOLDS FOR STUDY ROADWAYS

A	*B*	*C*	*D*	*E*	*F*
≤ 0.6	0.61 to 0.70	0.71 to 0.80	0.81 to 0.90	0.91 to 1.00	> 1.00

Notes: [1] Thresholds apply to arterial roadways with moderate access control.

Source: City of Elk Grove's *Traffic Impact Analysis Guidelines*, July 2000.

As outlined above, SR-99 from just south of Elk Grove Boulevard through the City includes one high occupancy vehicle (HOV) land and two general purpose lanes in each direction. Therefore, to account for HOV lane utilization, the freeway segment analysis is based on the traffic volume in the general purpose lanes, by removing vehicles using the HOV lanes from the analysis, based on measured HOV volumes documented in Caltrans' District 3 High Occupancy Vehicle Lanes Status Report, Sacramento Metropolitan Area (July 2011). For segments of SR-99 that include HOV lanes, the roadway operations analysis tables report total freeway volume (i.e., volume in HOV and general purpose lanes) and the volume in the general purpose lanes.

Roadway Segment Operations

Table 3.11-2 summarizes AM and PM peak hour directional traffic volumes, volume-to-capacity (V/C) ratio, and LOS for the study roadway segments. As shown, the following roadway segments operate unacceptably at LOS E or F:

CITY OF ELK GROVE ROADWAYS

- Bruceville Road (Southbound) – Elk Grove Boulevard to Bilby Road (LOS F during the PM peak hour)
- Calvine Road (Eastbound) – Power Inn Road to Elk Grove-Florin Road (LOS F during the PM peak hour along two-lane segment)
- Calvine Road (Westbound) – Power Inn Road to Elk Grove-Florin Road (LOS F during the AM peak hour along two-lane segment)
- Elk Grove Florin Road (Southbound) – Vintage Park Road to Calvine Road (LOS E during the PM peak hour)

SR-99 AND I-5

The roadway segment operations documented in Table 3.11-2 do not capture localized congestion due to operational effects of closely spaced intersections (long vehicle queues, low vehicle speed, and long delay), experienced near freeway interchanges. Similarly, peak period operations on SR-99 and I-5 may be worse than reported due to reoccurring bottlenecks. As documented in the California Department of Transportation *Mobility Performance Report*, 2009, several bottleneck locations exist on SR-99 that meter traffic northbound in the morning and southbound in the evening, which cause congested conditions (i.e., vehicle speed of 35 miles per hour or less) and vehicle queuing on northbound SR-99 during the AM peak period. Similarly, bottlenecks on southbound SR-99 in the evening meter traffic on SR-99 through Elk Grove. The CSMP documents bottleneck conditions on both I-5 and SR-99 in the northbound direction during the AM peak period and in the southbound direction during the PM peak period.

TABLE 3.11-2: PEAK HOUR ROADWAY SEGMENT OPERATIONS – EXISTING CONDITIONS

ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY CAPACITY (PER LANE)	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS
1	EB	Big Horn Boulevard	Franklin Boulevard	Laguna Boulevard	2	990	601	0.30	A	540	0.27	A
1	WB	Big Horn Boulevard	Franklin Boulevard	Laguna Boulevard	2	990	673	0.34	A	602	0.30	A
2	NB	Big Horn Boulevard	Laguna Boulevard	Elk Grove Boulevard	2	990	591	0.30	A	424	0.21	A
2	SB	Big Horn Boulevard	Laguna Boulevard	Elk Grove Boulevard	2	990	504	0.25	A	577	0.29	A
3	NB	Big Horn Boulevard	Elk Grove Boulevard	Kammerer Road	2	990	704	0.36	A	358	0.18	A
3	SB	Big Horn Boulevard	Elk Grove Boulevard	Kammerer Road	2	990	546	0.28	A	466	0.24	A
4	NB	Bradshaw Road	Vintage Park Road	Calvine Road	1	990	608	0.61	B	474	0.48	A
4	SB	Bradshaw Road	Vintage Park Road	Calvine Road	1	990	639	0.65	B	745	0.75	C
5	NB	Bradshaw Road	Calvine Road	Bond Road	1	990	561	0.57	A	303	0.31	A
5	SB	Bradshaw Road	Calvine Road	Bond Road	1	990	349	0.35	A	541	0.55	A
6	NB	Bradshaw Road	Bond Road	Grant Line Road	1	990	436	0.44	A	285	0.29	A
6	SB	Bradshaw Road	Bond Road	Grant Line Road	1	990	512	0.52	A	520	0.53	A
7	NB	Bruceville Road	Jacinto Road	Sheldon Road	2	990	884	0.45	A	729	0.37	A
7	SB	Bruceville Road	Jacinto Road	Sheldon Road	2	990	424	0.21	A	876	0.44	A
8	NB	Bruceville Road	Sheldon Road	Laguna Boulevard	2	990	1,612	0.81	D	1,211	0.61	B

ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY CAPACITY (PER LANE)	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS
8	SB	Bruceville Road	Sheldon Road	Laguna Boulevard	2	990	851	0.43	A	1,750	0.88	D
9	NB	Bruceville Road	Laguna Boulevard	Elk Grove Boulevard	3	990	909	0.31	A	863	0.32	A
9	SB	Bruceville Road	Laguna Boulevard	Elk Grove Boulevard	3	990	608	0.20	A	1,203	0.41	B
10	NB	Bruceville Road	Elk Grove Boulevard	Bilby Road	1	990	883	0.89	D	649	0.66	B
10	SB	Bruceville Road	Elk Grove Boulevard	Bilby Road	1	990	668	0.67	B	1,292	1.31	F
11	EB	Calvine Road	Power Inn Road	Elk Grove-Florin Road	2	990	1,430	0.72	C	2,010	1.02	F
11	WB	Calvine Road	Power Inn Road	Elk Grove-Florin Road	2	990	2,330	1.18	F	1,760	0.89	D
12	EB	Calvine Road	Elk Grove-Florin Road	Bradshaw Road	2	990	620	0.31	A	600	0.30	A
12	WB	Calvine Road	Elk Grove-Florin Road	Bradshaw Road	2	990	830	0.42	A	840	0.42	A
13	EB	Calvine Road	Bradshaw Road	Grant Line Road	1	990	630	0.64	B	780	0.79	C
13	WB	Calvine Road	Bradshaw Road	Grant Line Road	1	990	630	0.64	B	480	0.48	A
14	NB	Center Parkway	Sheldon Road	Jacinto Road	2	990	698	0.35	A	537	0.27	A
14	SB	Center Parkway	Sheldon Road	Jacinto Road	2	990	851	0.43	A	674	0.34	A
15	EB	Elk Grove Boulevard	Interstate 5	Franklin Boulevard	3	990	1,761	0.59	A	2,044	0.69	B
15	WB	Elk Grove Boulevard	Interstate 5	Franklin Boulevard	3	990	1,938	0.65	B	1,338	0.45	A
16	EB	Elk Grove Boulevard	Franklin Boulevard	Bruceville Road	2	990	1,644	0.83	D	1,405	0.71	C

ID	Direc-tion	Roadway	From	To	# of Lanes	Hourly Capacity (per Lane)	AM Volume	AM Volume to Capacity	AM LOS	AM Volume	AM Volume to Capacity	AM LOS
16	WB	Elk Grove Boulevard	Franklin Boulevard	Bruceville Road	3	990	909	0.31	A	1,421	0.48	A
17	EB	Elk Grove Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,670	0.56	A	1,357	0.46	A
17	WB	Elk Grove Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,041	0.35	A	1,756	0.59	A
18	EB	Elk Grove Boulevard	Big Horn Boulevard	East Stockton Boulevard	3	990	1,813	0.61	B	1,590	0.54	A
18	WB	Elk Grove Boulevard	Big Horn Boulevard	East Stockton Boulevard	3	990	1,308	0.44	A	1,989	0.67	B
19	EB	Elk Grove Boulevard	East Stockton Boulevard	Elk Grove-Florin Rd	2	990	1,243	0.63	B	1,314	0.66	B
19	WB	Elk Grove Boulevard	East Stockton Boulevard	Elk Grove-Florin Rd	2	990	1,086	0.55	A	1,300	0.66	B
20	EB	Elk Grove Boulevard	Elk Grove-Florin Rd	Waterman Road	1	990	434	0.44	A	639	0.65	B
20	WB	Elk Grove Boulevard	Elk Grove-Florin Rd	Waterman Road	1	990	652	0.66	B	578	0.58	A
21	NB	ElkGrove-Florin Road	Vintage Park Road	Calvine Road	3	990	1,871	0.63	B	1,234	0.42	A
21	SB	Elk Grove-Florin Road	Vintage Park Road	Calvine Road	2	990	1,319	0.67	B	1,965	0.99	E
22	NB	Elk Grove-Florin Road	Calvine Road	Bond Road	2	990	1,247	0.63	B	914	0.46	A
22	SB	Elk Grove-Florin Road	Calvine Road	Bond Road	2	990	1,069	0.54	A	1,349	0.68	B
23	NB	Elk Grove-Florin Road	Bond Road	Elk Grove Boulevard	2	990	952	0.48	A	841	0.42	A
23	SB	Elk Grove-Florin Road	Bond Road	Elk Grove Boulevard	2	990	927	0.47	A	963	0.49	A
24	NB	Elk Grove-Florin Road	Elk Grove Boulevard	East Stockton Boulevard	1	990	471	0.48	A	375	0.38	A

ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY CAPACITY (PER LANE)	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS
24	SB	Elk Grove-Florin Road	Elk Grove Boulevard	East Stockton Boulevard	1	990	228	0.23	A	384	0.39	A
25	EB	Grant Line Road	State Route 99	East Stockton Boulevard	3	990	731	0.25	A	790	0.27	A
25	WB	Grant Line Road	State Route 99	East Stockton Boulevard	3	990	721	0.24	A	831	0.28	A
26	EB	Grant Line Road	East Stockton Boulevard	Bradshaw Road	1	990	568	0.57	A	588	0.59	A
26	WB	Grant Line Road	East Stockton Boulevard	Bradshaw Road	1	990	553	0.56	A	645	0.65	B
27	EB	Kammerer Road	Big Horn Boulevard	Promenade Parkway	1	990	360	0.36	A	201	0.20	A
27	WB	Kammerer Road	Big Horn Boulevard	Promenade Parkway	1	990	200	0.20	A	380	0.38	A
28	EB	Laguna Boulevard	Interstate 5	Franklin Boulevard	3	990	1,178	0.40	A	2,271	0.76	C
28	WB	Laguna Boulevard	Interstate 5	Franklin Boulevard	3	990	1,456	0.49	A	1,341	0.45	A
29	EB	Laguna Boulevard	Franklin Boulevard	Bruceville Road	3	990	902	0.30	A	1,775	0.60	A
29	WB	Laguna Boulevard	Franklin Boulevard	Bruceville Road	3	990	957	0.32	A	1,154	0.39	A
30	EB	Laguna Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,078	0.36	A	1,947	0.66	B
30	WB	Laguna Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,353	0.46	A	1,475	0.50	A
31	EB	Laguna Boulevard	Big Horn Boulevard	East Stockton Boulevard	4	990	1,376	0.35	A	2,677	0.68	B
31	WB	Laguna Boulevard	Big Horn Boulevard	East Stockton Boulevard	3	990	2,049	0.69	B	2,103	0.71	C
32	EB	Sheldon Road	Center Parkway	East Stockton Boulevard	2	990	1,356	0.68	B	1,139	0.58	A

ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY CAPACITY (PER LANE)	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS
32	WB	Sheldon Road	Center Parkway	East Stockton Boulevard	2	990	985	0.50	A	1,586	0.80	D
33	EB	Sheldon Road	East Stockton Boulevard	Elk Grove-Florin Road	2	990	758	0.38	A	1,083	0.55	A
33	WB	Sheldon Road	East Stockton Boulevard	Elk Grove-Florin Road	2	990	1,298	0.66	B	1,055	0.53	A
34	EB	Sheldon Road	Elk Grove-Florin Road	Bradshaw Road	1	990	484	0.49	A	462	0.47	A
34	WB	Sheldon Road	Elk Grove-Florin Road	Bradshaw Road	1	990	369	0.37	A	521	0.53	A
35	NB	State Route 99	Eschinger Road	Grant Line Road	2	2200	2,500	0.57	A	2,470	0.56	A
35	SB	State Route 99	Eschinger Road	Grant Line Road	2	2200	2,160	0.49	A	2,700	0.61	B
36	NB	State Route 99	Grant Line Road	Elk Grove Boulevard	2	2200	2,110	0.48	A	2,160	0.49	A
36	SB	State Route 99	Grant Line Road	Elk Grove Boulevard	2	2200	1,890	0.43	A	2,290	0.52	A
37	NB	State Route 99[1]	Elk Grove Boulevard	Laguna Boulevard	2+HOV GP	2200	3,220 2,160	0.49	A	3,140 2,100	0.48	A
37	SB	State Route 99[1]	Elk Grove Boulevard	Laguna Boulevard	2+HOV GP	2200	2,890 1,940	0.44	A	3,640 2,440	0.55	A
38	NB	State Route 99[1]	Laguna Boulevard	Sheldon Road	2+HOV GP	2200	4,064 2720	0.62	B	4,033 2700	0.61	B
38	SB	State Route 99[1]	Laguna Boulevard	Sheldon Road	2+HOV	2200	3,602	0.55	B	4,479	0.68	B

ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY CAPACITY (PER LANE)	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS
					GP		2410			3000		
39	NB	State Route 99[1]	Sheldon Road	Calvine Road	2+HOV GP	2200	4,394 2940	0.67	B	4,360 2920	0.66	B
39	SB	State Route 99[1]	Sheldon Road	Calvine Road	2+HOV GP	2200	3,895 2610	0.59	B	4,843 3240	0.74	C
40	NB	State Route 99[1]	Calvine Road	Stockton Boulevard	2+HOV GP	2200	5,055 3390	0.77	B	5,016 3360	0.76	C
40	SB	State Route 99[1]	Calvine Road	Stockton Boulevard	2+HOV GP	2200	4,480 3000	0.68	B	5,571 3730	0.85	D
41	NB	Waterman Road	Calvine Road	Vintage Park Road	1	990	379	0.38	A	395	0.40	A
41	SB	Waterman Road	Calvine Road	Vintage Park Road	1	990	544	0.55	A	436	0.44	A
42	NB	Waterman Road	Calvine Road	Bond Road	1	990	426	0.43	A	305	0.31	A
42	SB	Waterman Road	Calvine Road	Bond Road	1	990	423	0.43	A	502	0.51	A
43	NB	Waterman Road	Bond Road	Grant Line Road	1	990	570	0.58	A	499	0.50	A
43	SB	Waterman Road	Bond Road	Grant Line Road	1	990	463	0.47	A	610	0.62	B
44	NB	Interstate 5	Twin Cities Road	Hood-Franklin Road	2	2200	1,610	0.37	A	1,940	0.44	A

ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY CAPACITY (PER LANE)	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS
44	SB	Interstate 5	Hood-Franklin Road	Twin Cities Road	2	2200	1,490	0.34	A	1,910	0.43	A
45	NB	Interstate 5	Hood-Franklin Road	Elk Grove Boulevard	2	2200	2,140	0.49	A	1,950	0.44	A
45	SB	Interstate 5	Elk Grove Boulevard	Hood-Franklin Boulevard	2	2200	1,530	0.35	A	2,160	0.49	A
46	NB	Interstate 5	Elk Grove Boulevard	Laguna Boulevard	2	2200	2,719	0.62	B	2,475	0.56	A
46	SB	Interstate 5	Laguna Boulevard	Elk Grove Boulevard	2	2200	1,940	0.44	A	2,739	0.62	B
47	NB	Interstate 5	Laguna Boulevard	Pocket Road	3	2200	3,749	0.57	A	3,413	0.52	A
47	SB	Interstate 5	Pocket Road	Laguna Boulevard	3	2200	3,675	0.56	A	3,777	0.57	A

Notes:
[1] SR 99 operations based on general purpose (GP) volumes after accounting for traffic volume in HOV lane.
Fehr & Peers, 2013

BICYCLE AND PEDESTRIAN FACILITIES

Bicycle and pedestrian trips account for approximately 2.8 percent of all work trips and 4.9 percent of all non-work trips made by residents and employees in suburban areas. This estimate is from the Pre-Census Travel Behavior Report Analysis of the *2000 SACOG Household Travel Survey* prepared by the Sacramento Area Council of Governments in 2001.

The majority of the bike paths in the City limits are Class II lanes, which are located on existing streets or highways and are striped for one-way bicycle travel. Below are descriptions of bicycle paths and their classifications.

- Class I Bike Paths provide a completely separated right-of-way for the exclusive use of bicycles and pedestrian with cross-flow minimized.
- Class II Bike Lanes are striped lanes for one-way bike travel on a street or highway.
- Class III Bike Routes provide for shared use with pedestrians or motor vehicle traffic.

The City adopted the City of Elk Grove Bicycle and Pedestrian Master Plan (BPMP) in July 2004. The BPMP identifies existing facilities opportunities, constraints and destination points for bicycle users and pedestrians in the City of Elk Grove. Existing and proposed bicycle and pedestrian facilities documented in the BPMP are shown in Figure 3.11-2.

TRANSIT FACILITIES

The City of Elk Grove is served by its own transit system, e-Tran. E-Tran neighborhood shuttle service (ez-tran), limited local transit service, and commuter routes. Local transit service is provided on weekdays (six routes) and weekends (three routes). E-Tran provides nine commuter routes that operate mid-week, including two reverse commuter routes. The current e-Trans system map is shown as Figure 3.11-3.

3.11.2 REGULATORY FRAMEWORK

FEDERAL AND STATE

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining all state-owned roadways in Sacramento County, including the City. Federal highway standards are implemented in California by Caltrans. Any improvements or modifications to the State highway system within the City need to be approved by Caltrans, and the City has no ability to unilaterally make improvements to the State highway system.

Caltrans approved the *State Route 99 & Interstate 5 Corridor System Management Plan* (CSMP) in May 2009 to provide integrated management of all travel modes (transit, cars, trucks, bicycles) and infrastructure (rail tracks, roads, highways, information systems, bike routes) in the I-5/SR-99 corridor. The CSMP replaces the Transportation Concept Corridor Reports (TCCRs) that previously served as the long-range planning documents for SR-99 and I-5.

"Concept LOS" and "Concept Facility" have traditionally been used in Caltrans TCCRs to reflect the minimum level or quality of operations acceptable for each route segment within the 20-year planning period and the highway facility needed in the next 20 years to maintain the Concept LOS. The Concept LOS for SR-99 in Sacramento County is F from the San Joaquin-Sacramento County Line to Junction SR 51 and is E from Junction I-5 to the Sutter County Line. The Concept LOS for I-5 in Sacramento County is F from Hood-Franklin Boulevard to the I-5/SR-99 Interchange and is D from the I-5/SR-99 Interchange to the Sacramento/Yolo County line.

LOCAL

Sacramento Area Council of Governments (SACOG)

SACOG is designated as the Metropolitan Planning Organization (MPO) responsible for developing a regional transportation plan every four years in coordination with Sacramento, Yolo, Yuba, Sutter, El Dorado and Placer counties and the 22 cities within those counties (excluding the Tahoe Basin). The Metropolitan Transportation Plan/ Sustainable Communities Strategy for 2035 (MTP/SCS) covers the period from 2008 to 2035. The MTP/SCS takes an integrated approach to transportation and land use, and their impacts on air quality and climate change. The MTP/ SCS represents transportation improvements and investments that will serve the projected land use pattern and population growth forecasts in the Sacramento region in the near- and long-term.

City of Elk Grove General Plan

The Elk Grove General Plan guides development within the City limits as well as the annexation and any subsequent development of areas outside the City limits. The General Plan has a Circulation Element that is prepared consistent with the requirements of the California Government Code. The Circulation Element addresses all forms of transportation within the circulation system. This specifically includes: motor vehicles, including cars and trucks; trains, for both freight and passenger traffic (on "heavy" and "light" rail lines); public transit; bicycles; pedestrian travel; and air travel. Relevant circulation policies include:

Policy CI-2 The City shall coordinate and participate with the City of Sacramento, Sacramento County and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations.

Policy CI-4 Specific Plans, Special Planning Areas, and development projects shall be designed to promote pedestrian movement through direct, safe, and pleasant routes that connect destinations inside and outside the plan or project area.

Policy CI-6 The City shall require that transit service is provided in all areas of Elk Grove, including rural areas, so that transit dependent residents of those areas are not cut off from community services, events, and activities.

Policy CI-10 The City shall implement the roadway master plan shown in Figure CI-2. The following policies apply to selected roadways:

- The City shall use the latest version of Caltrans' "Transportation Concept Report" for I-5 and Hwy 99 to determine the planned width of these freeways.

- "Expanded right-of-way" indicates roadways on which sufficient width is provided for a middle two-way turn lane and/or expanded turn pockets at roadway intersections.
- The City will widen Grant Line Road north of Bradshaw Road only as needed to accommodate traffic, and strongly supports efforts to locate a future regional connector to provide traffic relief for this roadway. Grant Line Road north of Bradshaw Road should be widened in phases as needed, and should be widened to six lanes only if no alternative route for a future regional connector (see Policy CI-12) has been located and traffic conditions warrant the widening.

Policy CI-11 The City shall assist Caltrans in implementing improvements to I-5 and Hwy 99 within the city.

Policy CI-12 The City supports efforts to locate an alternative route for a future regional roadway connecting Hwy 99 and Hwy 50 in order to reduce the need for widening of Grant Line Road, particularly in the "Sheldon town" area.

Policy CI-13 The City shall require that all roadways and intersections in Elk Grove operate at a minimum Level of Service "D" at all times.

Policy CI-14 The City recognizes that Level of Service D may not be achieved on some roadway segments, and may also not be achieved at some intersections. Roadways on which LOS D is projected to be exceeded are shown in the General Plan Background Report, based on the latest traffic modeling conducted by the City. On these roadways, the City shall ensure that improvements to construct the ultimate roadway system as shown in this Circulation Element are completed, with the recognition that maintenance of the desired level of service may not be achievable.

Policy CI-15 Development projects shall be required to provide funding or to construct roadway/intersection improvements to implement the City's Circulation Master Plan. The payment of established traffic impact or similar fees shall be considered to provide compliance with the requirements of this policy with regard to those facilities included in the fee program, provided that the City finds that the fee adequately funds all required roadway and intersection improvements. If payment of established fees is used to provide compliance with this policy, the City may also require the payment of additional fees if necessary to cover the fair share cost of facilities not included in the fee program.

Policy CI-16 Where a development project is required to perform new roadway construction or road widening, the entire roadway shall be completed to its planned width from curb-to-curb prior to the operation of the project for which the improvements were constructed, unless otherwise approved by the City Engineer. Such roadway construction shall also provide facilities adequate to ensure pedestrian safety as determined by the City Engineer.

Policy CI-18 To the extent possible, major traffic routes for residential areas should be separate from those used by the city's industrial areas, with the purpose of avoiding traffic conflicts and potential safety problems.

Policy CI-21 The City shall require the installation of traffic pre-emption devices for emergency vehicles (police and fire) at all newly constructed intersections, and shall seek to retrofit all existing intersections to incorporate these features.

Policy CI-22 Where traffic calming devices or techniques are employed, the City shall coordinate design and implementation with the Elk Grove Police Department and the Elk Grove CSD to ensure adequate access for police and fire vehicles.

Policy CI-23 All public streets should have sufficient width to provide for parking on both sides of the street and enough remaining pavement width to provide for fire emergency vehicle access.

City of Elk Grove Transportation Improvement Plan

The City's *Transportation Improvement Plan* (TIP) represents a five-year transportation capital improvement plan for the City. The TIP provides program summary information for the City's various capital improvement funding programs, as well as project summary information (i.e., revenues, expenditures, and schedules) for the specific projects selected for implementation during the current TIP period. The TIP identifies projects within the City limits that need various improvements during the planning horizon. The improvements include but are not limited to street extensions, traffic signals, bikeway improvements, ramp widenings, and bridge replacements.

Bicycle Plan

The *Bicycle and Pedestrian Master Plan*, adopted in 2004, provides for a Citywide network of bicycle and pedestrian facilities, including sidewalks, bike paths, lanes and routes, along with bicycle-related programs and support facilities. The *Bicycle and Pedestrian Master Plan* map showing existing and planned facilities is shown in Figure 3.11-2.

3.11.3 PROJECT CHARACTERISTICS

PROJECT DESCRIPTION

The Project includes revisions to the adopted Housing Element that are necessary to comply with changes to State law. Relative to transportation, the Project includes amendments to the land use and/or zoning designations of up to 42 sites throughout the City to accommodate housing growth and the City's fair-share of the 2013-2021 Regional Housing Needs Assessment (RHNA). Table 2.0-1 summarizes the proposed changes to the opportunity sites by comparing the current General Plan designation and zoning to the Project. The Project will increase the density of sites currently designated and zoned for residential use, except for twelve sites, where the Project will change non-residential designations (i.e., commercial and industrial) to high density residential. Figure 2.0-3 shows the location of the 42 opportunity sites and Table 2.0-1 identifies the acreage, existing and proposed General Plan land use designations and zoning, and potential units associated with each site.

TRIP GENERATION

As described in Chapter 2.0, the Project would result in up to approximately 8,843 dwelling units on up to 42 opportunity sites. Table 3.11-3 compares daily, AM peak hour, and PM peak hour trip generation of the opportunity sites with the current General Plan designations to the Project using trip generation rates published in Trip Generation, 9th Edition (Institute of Transportation Engineers, 2012).

As shown in Table 3.11-3, the Project is expected to increase daily, AM, and PM peak hour trip generation. The Project would result in an increase of 2,940 trips per day, 1,190 trip during the AM peak hour and 40 trips during the PM peak hour, in comparison to the adopted General Plan. The larger increases in daily and AM peak hour trip generation are due primarily to converting sites with very low residential densities to higher density designation. In comparison, the PM peak hour trip generation does not increase much due to the conversion of commercial sites to residential uses, since commercial (i.e., retail) land use generates trips at higher rates during the PM peak hour. Detailed trip generation for the 42 opportunity sites is included in Appendix C as Attachment A to the Traffic Impact Study for Daily, AM peak hour, and PM peak hour conditions.

TABLE 3.11-3: TRIP GENERATION COMPARISON

PERIOD		CURRENT GENERAL PLAN	PROJECT	DIFFERENCE (CURRENT GENERAL PLAN – PROJECT)
Daily		55,300	58,240	2,940
Peak Hour	AM	2,880	4,070	1,190
	PM	5,090	5,130	40

Notes: [1]Trip rates from *Trip Generation, 9th ed.* (Institute of Transportation Engineers, 2012).

Source: Fehr & Peers, 2013

3.11.5 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are based on the CEQA Guidelines as well as criteria established by the City of Elk Grove General Plan. The Project would result in a significant impact on transportation if it would:

- Conflict with an applicable plan, code or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
  - Roadway segments: An impact to a roadway segment is considered significant, and mitigation measures must be identified when:
    - The traffic generated by the project degrades the LOS from an acceptable LOS D or better (without the Project) to an unacceptable LOS E or LOS F (with the project);
    - The level of service (without Project) is unacceptable and project generated traffic increases the V/C ratio by 0.05 or more.

- Freeway segments: An impact is considered significant on freeway facilities if the Project causes the facility to change from acceptable to unacceptable LOS. For facilities, which are or will be (in the cumulative condition), operating at unacceptable LOS without the Project, an impact is considered significant if the project:
    - Increases the V/C ratio on a freeway mainline segment or freeway ramp junction by 0.05.
    - Increase the number of peak hour vehicles on a freeway mainline segment or freeway ramp junction ramp junction by more than five percent.
- According to the Guide for the Preparation of Traffic Impact Studies (Caltrans, June 2001), Caltrans strives to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities; therefore, LOS D was selected as the *minimum* standard for all study freeway facilities. Unlike the City of Elk Grove traffic impact study guidelines, Caltrans does *not provide* a threshold for determining if the addition of project traffic to a freeway facility that operates unacceptably without the project is considered significant. Therefore, under these circumstances, the addition of any project traffic is considered significant.

- Substantially increase hazards due to a design feature.
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

CUMULATIVE TRAFFIC CONDITIONS

This section describes the development of cumulative traffic volume forecasts and resulting roadway segments operations under cumulative conditions without and with the Project.

Traffic Volume Forecasts

A modified version of SACOG's 2035 MTP/SCS travel demand forecasting (TDF) model was used to develop cumulative traffic volumes at the study roadway facilities. The TDF model reflects build out development levels in the City of Elk Grove, including development in the Southeast Policy Area, and the City's General Plan transportation system. Year 2035 levels of development are assumed outside the City of Elk Grove. All forecasts are adjusted using a growth increment method (*i.e., the difference* method) that adds the growth in forecasts travel demand to existing traffic counts. As expected, traffic volumes increase compared to *existing conditions*. Traffic volumes on SR-99 show a larger increase in what is considered the off-peak direction of flow today (i.e., southbound in the AM peak hour and northbound in the PM peak hour). This is reasonable given the increase in employment land use in the Southeast Policy Area along Kammerer Road.

Roadway Segment Operations

Table 3.11-4 summarizes AM and PM peak hour directional traffic volume forecasts, V/C ratio, and LOS for the study roadway segments under cumulative conditions without and with the Project.

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

		ROADWAY DESCRIPTION					CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
1	EB	Big Horn Boulevard	Franklin Boulevard	Laguna Boulevard	2	990	1,040	0.53	A	820	0.41	A	1,030	0.52	A	840	0.42	A
1	WB	Big Horn Boulevard	Franklin Boulevard	Laguna Boulevard	2	990	890	0.45	A	1,090	0.55	A	910	0.46	A	1,090	0.55	A
2	NB	Big Horn Boulevard	Laguna Boulevard	Elk Grove Boulevard	2	990	1,400	0.71	C	1,240	0.63	B	1,390	0.70	C	1,230	0.62	B
2	SB	Big Horn Boulevard	Laguna Boulevard	Elk Grove Boulevard	2	990	1,220	0.62	B	1,310	0.66	B	1,230	0.62	B	1,310	0.66	B
3	NB	Big Horn Boulevard	Elk Grove Boulevard	Kammerer Road	2	990	1,660	0.84	D	1,590	0.80	D	1,660	0.84	D	1,590	0.80	D
3	SB	Big Horn Boulevard	Elk Grove Boulevard	Kammerer Road	2	990	1,760	0.89	D	1,560	0.79	C	1,760	0.89	D	1,570	0.79	C
4	NB	Bradshaw Road	Vintage Park Road	Calvine Road	3	990	1,220	0.41	A	1,070	0.36	A	1,220	0.41	A	1,070	0.36	A
4	SB	Bradshaw Road	Vintage Park Road	Calvine Road	3	990	1,200	0.40	A	1,260	0.42	A	1,160	0.39	A	1,280	0.43	A
5	NB	Bradshaw Road	Calvine Road	Bond Road	3	990	1,090	0.37	A	980	0.33	A	1,100	0.37	A	980	0.33	A

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

	ROADWAY DESCRIPTION						CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
5	SB	Bradshaw Road	Calvine Road	Bond Road	3	990	960	0.32	A	1,050	0.35	A	930	0.31	A	1,060	0.36	A
6	NB	Bradshaw Road	Bond Road	Grant Line Road	3	990	780	0.26	A	860	0.29	A	790	0.27	A	860	0.29	A
6	SB	Bradshaw Road	Bond Road	Grant Line Road	3	990	1,050	0.35	A	890	0.30	A	1,040	0.35	A	890	0.30	A
7	NB	Bruceville Road	Jacinto Road	Sheldon Road	3	990	900	0.30	A	890	0.30	A	930	0.31	A	860	0.29	A
7	SB	Bruceville Road	Jacinto Road	Sheldon Road	3	990	750	0.25	A	1,150	0.39	A	750	0.25	A	1,160	0.39	A
8	NB	Bruceville Road	Sheldon Road	Laguna Boulevard	3	990	1,930	0.65	B	1,870	0.63	B	1,990	0.67	B	1,870	0.63	B
8	SB	Bruceville Road	Sheldon Road	Laguna Boulevard	3	990	1,430	0.48	A	2,150	0.72	C	1,410	0.47	A	2,170	0.73	C
9	NB	Bruceville Road	Laguna Boulevard	Elk Grove Boulevard	3	990	1,460	0.49	A	1,720	0.58	A	1,500	0.51	A	1,730	0.58	A
9	SB	Bruceville Road	Laguna Boulevard	Elk Grove Boulevard	3	990	1,310	0.44	A	1,830	0.62	B	1,380	0.46	A	1,850	0.62	B

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

ROADWAY DESCRIPTION							CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
10	NB	Bruceville Road	Elk Grove Boulevard	Bilby Road	3	990	1,170	0.39	A	1,100	0.37	A	1,180	0.40	A	1,110	0.37	A
10	SB	Bruceville Road	Elk Grove Boulevard	Bilby Road	3	990	1,010	0.34	A	1,620	0.55	A	1,050	0.35	A	1,630	0.55	A
11	EB	Calvine Road	Power Inn Road	Elk Grove-Florin Road	3	990	1,470	0.49	A	2,180	0.73	C	1,520	0.51	A	2,200	0.74	C
11	WB	Calvine Road	Power Inn Road	Elk Grove-Florin Road	3	990	2,500	0.84	D	1,960	0.66	B	2,480	0.84	D	2,010	0.68	B
12	EB	Calvine Road	Elk Grove-Florin Road	Bradshaw Road	3	990	670	0.23	A	650	0.22	A	670	0.23	A	650	0.22	A
12	WB	Calvine Road	Elk Grove-Florin Road	Bradshaw Road	3	990	880	0.30	A	890	0.30	A	880	0.30	A	890	0.30	A
13	EB	Calvine Road	Bradshaw Road	Grant Line Road	3	990	680	0.23	A	830	0.28	A	680	0.23	A	830	0.28	A
13	WB	Calvine Road	Bradshaw Road	Grant Line Road	3	990	630	0.21	A	530	0.18	A	680	0.23	A	530	0.18	A

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

		ROADWAY DESCRIPTION					CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
14	NB	Center Parkway	Sheldon Road	Jacinto Road	3	990	920	0.31	A	1,130	0.38	A	970	0.33	A	1,110	0.37	A
14	SB	Center Parkway	Sheldon Road	Jacinto Road	3	990	1,380	0.46	A	880	0.30	A	1,400	0.47	A	880	0.30	A
15	EB	Elk Grove Boulevard	Interstate 5	Franklin Boulevard	3	990	2,100	0.71	C	2,090	0.70	C	2,110	0.71	C	2,090	0.70	C
15	WB	Elk Grove Boulevard	Interstate 5	Franklin Boulevard	3	990	1,990	0.67	B	1,640	0.55	A	1,990	0.67	B	1,670	0.56	A
16	EB	Elk Grove Boulevard	Franklin Boulevard	Bruceville Road	3	990	2,060	0.69	B	1,680	0.57	A	2,110	0.71	C	1,690	0.57	A
16	WB	Elk Grove Boulevard	Franklin Boulevard	Bruceville Road	3	990	1,000	0.34	A	1,790	0.60	B	1,040	0.35	A	1,800	0.61	B
17	EB	Elk Grove Boulevard	Bruceville Road	Big Horn Boulevard	3	990	2,180	0.73	C	1,860	0.63	B	2,300	0.77	C	1,870	0.63	B
17	WB	Elk Grove Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,190	0.40	A	2,330	0.78	C	1,300	0.44	A	2,340	0.79	C

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

	ROADWAY DESCRIPTION						CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
18	EB	Elk Grove Boulevard	Big Horn Boulevard	East Stockton Boulevard	3	990	1,900	0.64	B	1,900	0.64	B	1,950	0.66	B	1,910	0.64	B
18	WB	Elk Grove Boulevard	Big Horn Boulevard	East Stockton Boulevard	3	990	1,710	0.58	A	2,080	0.70	C	1,740	0.59	A	2,080	0.70	C
19	EB	Elk Grove Boulevard	East Stockton Boulevard	Elk Grove-Florin Road	2	990	1,290	0.65	B	1,360	0.69	B	1,290	0.65	B	1,360	0.69	B
19	WB	Elk Grove Boulevard	East Stockton Boulevard	Elk Grove-Florin Road	2	990	1,150	0.58	A	1,350	0.68	B	1,190	0.60	B	1,350	0.68	B
20	EB	Elk Grove Boulevard	Elk Grove-Florin Road	Waterman Road	1	990	820	0.83	D	990	1.00	E	830	0.84	D	990	1.00	E
20	WB	Elk Grove Boulevard	Elk Grove-Florin Road	Waterman Road	1	990	980	0.99	E	930	0.94	E	980	0.99	E	930	0.94	E
21	NB	Elk-Grove Florin Road	Vintage Park Road	Calvine Road	3	990	2170	0.73	C	1950	0.66	B	2190	0.74	C	1920	0.65	B

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

ROADWAY DESCRIPTION							CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
21	SB	Elk-Grove Florin Road	Vintage Park Road	Calvine Road	3	990	2140	0.72	C	2410	0.81	D	2080	0.70	C	2420	0.81	D
22	NB	Elk Grove-Florin Road	Calvine Road	Bond Road	3	990	1,390	0.47	A	1,410	0.47	A	1,420	0.48	A	1,430	0.48	A
22	SB	Elk Grove-Florin Road	Calvine Road	Bond Road	3	990	1,610	0.54	A	1,530	0.52	A	1,620	0.55	A	1,540	0.52	A
23	NB	Elk Grove-Florin Road	Bond Road	Elk Grove Boulevard	2	990	1,000	0.51	A	1,000	0.51	A	1,000	0.51	A	1,000	0.51	A
23	SB	Elk Grove-Florin Road	Bond Road	Elk Grove Boulevard	2	990	1,190	0.60	B	1,010	0.51	A	1,210	0.61	B	1,010	0.51	A
24	NB	Elk Grove-Florin Road	Elk Grove Boulevard	East Stockton Boulevard	1	990	540	0.55	A	630	0.64	B	550	0.56	A	650	0.66	B
24	SB	Elk Grove-Florin Road	Elk Grove Boulevard	East Stockton Boulevard	1	990	470	0.47	A	560	0.57	A	450	0.45	A	550	0.56	A
25	EB	Grant Line Road	State Route 99	East Stockton Boulevard	4	990	2670	0.67	B	3760	0.95	E	2720	0.69	B	3760	0.95	E

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

		ROADWAY DESCRIPTION					CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
25	WB	Grant Line Road	State Route 99	East Stockton Boulevard	4	990	3620	0.91	E	3380	0.85	D	3620	0.91	E	3390	0.86	D
26	EB	Grant Line Road	East Stockton Boulevard	Bradshaw Road	4	990	1,560	0.39	A	2,030	0.51	A	1,590	0.40	A	2,020	0.51	A
26	WB	Grant Line Road	East Stockton Boulevard	Bradshaw Road	4	990	2,010	0.51	A	1,760	0.44	A	1,990	0.50	A	1,770	0.45	A
27	EB	Kammerer Road	Big Horn Boulevard	Promenade Parkway	3	990	1,700	0.57	A	1,810	0.61	B	1,760	0.59	A	1,810	0.61	B
27	WB	Kammerer Road	Big Horn Boulevard	Promenade Parkway	3	990	1,620	0.55	A	1,960	0.66	B	1,650	0.56	A	1,970	0.66	B
28	EB	Laguna Boulevard	Interstate 5	Franklin Boulevard	3	990	1,440	0.48	A	2,300	0.77	C	1,460	0.49	A	2,290	0.77	C
28	WB	Laguna Boulevard	Interstate 5	Franklin Boulevard	3	990	1,510	0.51	A	1,670	0.56	A	1,510	0.51	A	1,660	0.56	A
29	EB	Laguna Boulevard	Franklin Boulevard	Bruceville Road	3	990	1,330	0.45	A	2,000	0.67	B	1,330	0.45	A	2,010	0.68	B

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

	ROADWAY DESCRIPTION						CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
29	WB	Laguna Boulevard	Franklin Boulevard	Bruceville Road	3	990	1,200	0.40	A	1,570	0.53	A	1,210	0.41	A	1,590	0.54	A
30	EB	Laguna Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,740	0.59	A	2,510	0.85	D	1,750	0.59	A	2,550	0.86	D
30	WB	Laguna Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,880	0.63	B	2,050	0.69	B	1,920	0.65	B	2,070	0.70	B
31	EB	Laguna Boulevard	Big Horn Boulevard	East Stockton Boulevard	3	990	2,130	0.72	C	3,400	1.14	**F**	2,200	0.74	C	3,400	1.14	**F**
31	WB	Laguna Boulevard	Big Horn Boulevard	East Stockton Boulevard	3	990	2,720	0.92	**E**	2,890	0.97	**E**	2,780	0.94	**E**	2,910	0.98	**E**
32	EB	Sheldon Road	Center Parkway	East Stockton Boulevard	3	990	2,470	0.83	D	2,340	0.79	C	2,520	0.85	D	2,360	0.79	C
32	WB	Sheldon Road	Center Parkway	East Stockton Boulevard	3	990	1,850	0.62	B	2,610	0.88	D	1,910	0.64	B	2,650	0.89	D

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

		ROADWAY DESCRIPTION					CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
33	EB	Sheldon Road	East Stockton Boulevard	Elk Grove-Florin Road	2	990	1,490	0.75	C	1,900	0.96	E	1,510	0.76	C	1,910	0.96	E
33	WB	Sheldon Road	East Stockton Boulevard	Elk Grove-Florin Road	2	990	2,040	1.03	F	1,840	0.93	E	2,030	1.03	F	1,850	0.93	E
34	EB	Sheldon Road	Elk Grove-Florin Road	Bradshaw Road	2	990	1,050	0.53	A	1,070	0.54	A	1,060	0.54	A	1,060	0.54	A
34	WB	Sheldon Road	Elk Grove-Florin Road	Bradshaw Road	2	990	980	0.49	A	1,140	0.58	A	950	0.48	A	1,150	0.58	A
35	NB	State Route 99	Eschinger Road	Grant Line Road	2	2200	2,900	0.66	B	2,950	0.67	B	2,910	0.66	B	2,960	0.67	B
35	SB	State Route 99	Eschinger Road	Grant Line Road	2	2200	2,680	0.61	B	2,840	0.65	B	2,650	0.60	B	2,810	0.64	B
36	NB	State Route 99	Grant Line Road	Elk Grove Boulevard	2	2200	2,510	0.57	A	3,330	0.76	C	2,500	0.57	A	3,330	0.76	C
36	SB	State Route 99	Grant Line Road	Elk Grove Boulevard	2	2200	2,950	0.67	B	2,730	0.62	B	2,890	0.66	B	2,700	0.61	B

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

	ROADWAY DESCRIPTION						CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
37	NB	State Route 99[1]	Elk Grove Boulevard	Laguna Boulevard	2+HOV	2200	3,910	0.60	A	4,710	0.72	C	3,880	0.59	A	4,710	0.72	C
					GP		2,620			3,610			2,600			3,160		
37	SB	State Route 99[1]	Elk Grove Boulevard	Laguna Boulevard	2+HOV	2200	4,140	0.63	B	4,090	0.62	B	4,080	0.62	B	4,070	0.62	B
					GP		2,770			2,740			2,730			2,730		
38	NB	State Route 99[1]	Laguna Boulevard	Sheldon Road	2+HOV	2200	4,230	0.64	B	5,040	0.77	C	4,250	0.65	B	5,030	0.77	C
					GP		2,830			3,380			2,850			3,370		
38	SB	State Route 99[1]	Laguna Boulevard	Sheldon Road	2+HOV	2200	4,790	0.73	C	4,670	0.71	C	4,740	0.72	C	4,630	0.70	B
					GP		3,210			3,130			3,180			3,100		
39	NB	State Route 99[1]	Sheldon Road	Calvine Road	2+HOV	2200	4,550	0.69	B	5,350	0.81	D	4,550	0.69	B	5,350	0.81	D
					GP		3,050			3,580			3,050			3,580		
39	SB	State Route 99[1]	Sheldon Road	Calvine Road	2+HOV	2200	4,950	0.75	C	5,130	0.78	C	4,810	0.73	C	5,080	0.77	C
					GP		3,320			3,440			3,220			3,400		

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

		ROADWAY DESCRIPTION					CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
40	NB	State Route 99[1]	Calvine Road	Stockton Boulevard	2+HOV GP	2200	5,280 3,540	0.80	C	5,570 3,730	0.85	D	5,490 3,680	0.84	D	5,620 3,770	0.86	D
40	SB	State Route 99[1]	Calvine Road	Stockton Boulevard	2+HOV GP	2200	5,140 3,440	0.78	C	5,690 3,810	0.87	D	5,010 3,360	0.76	C	5,770 3,870	0.88	D
41	NB	Waterman Road	Calvine Road	Vintage Park Road	2	990	780	0.39	A	780	0.39	A	810	0.41	A	770	0.39	A
41	SB	Waterman Road	Calvine Road	Vintage Park Road	2	990	890	0.45	A	810	0.41	A	870	0.44	A	810	0.41	A
42	NB	Waterman Road	Calvine Road	Bond Road	2	990	790	0.40	A	730	0.37	A	810	0.41	A	730	0.37	A
42	SB	Waterman Road	Calvine Road	Bond Road	2	990	840	0.42	A	860	0.43	A	860	0.43	A	870	0.44	A

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

ROADWAY DESCRIPTION							CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
43	NB	Waterman Road	Bond Road	Grant Line Road	2	990	1,010	0.51	A	1,040	0.53	A	1,040	0.53	A	1,040	0.53	A
43	SB	Waterman Road	Bond Road	Grant Line Road	2	990	960	0.48	A	1,060	0.54	A	980	0.49	A	1,060	0.54	A
44	NB	Interstate 5	Twin Cities Road	Hood-Franklin Road	2	2200	2,560	0.58	A	2,710	0.62	B	2,530	0.58	A	2,720	0.62	B
44	SB	Interstate 5	Hood-Franklin Road	Twin Cities Road	2	2200	2,300	0.52	A	2,830	0.64	B	2,340	0.53	A	2,850	0.65	B
45	NB	Interstate 5	Hood-Franklin Road	Elk Grove Boulevard	2	2200	2,730	0.62	B	2,780	0.63	B	2,740	0.62	B	2,780	0.63	B
45	SB	Interstate 5	Elk Grove Boulevard	Hood-Franklin Boulevard	2	2200	2,440	0.55	A	2,910	0.66	B	2,500	0.57	A	2,950	0.67	B

TABLE 3.11-4: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

ROADWAY DESCRIPTION							CURRENT GENERAL PLAN						GENERAL PLAN PLUS PROJECT					
ID	DIRECTION	ROADWAY	FROM	TO	# OF LANES	HOURLY PER LANE CAPACITY	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS	AM VOLUME	AM V/C	AM LOS	PM VOLUME	PM V/C	PM LOS
46	NB	Interstate 5	Elk Grove Boulevard	Laguna Boulevard	2	2200	3,270	0.74	C	3,700	0.84	D	3,300	0.75	C	3,690	0.84	D
46	SB	Interstate 5	Laguna Boulevard	Elk Grove Boulevard	2	2200	3,230	0.73	C	3,480	0.79	C	3,240	0.74	C	3,580	0.81	D
47	NB	Interstate 5	Laguna Boulevard	Pocket Road	3	2200	3,940	0.60	A	4,540	0.69	B	4,060	0.62	B	4,500	0.68	B
47	SB	Interstate 5	Pocket Road	Laguna Boulevard	3	2200	4,970	0.75	C	4,230	0.64	B	4,950	0.75	C	4,340	0.66	B

Notes:
[1] SR 99 operations based on general purpose (GP) volumes after accounting for traffic volume in HOV lane.
Fehr & Peers, 2013

IMPACTS AND MITIGATION MEASURES

Impact 3.11-1: The Project has the potential to conflict with an applicable plan, ordinance, or policy establishing acceptable levels of service for the performance of the circulation system. (significant and unavoidable)

The Project would result in increased traffic and associated changes in traffic volumes and levels of service. The Project would result in an increase in traffic beyond the level of traffic anticipated under the adopted General Plan designations. While the Project does not propose any development, it is anticipated that the opportunity sites would be developed under cumulative conditions. Subsequent development on the opportunity sites would result in 58,240 daily trips, of which 4,070 would occur during the AM peak hour and 5,130 during the PM peak hour Table 3.11-3). The majority of these trips would occur under the existing General Plan land use designations and zoning of the opportunity sites; however, 2,940 of the Project's trips would be in addition to what is currently allowed under the General Plan. Of the Project's projected increase of 2,940 trips, 1,190 would occur during the AM peak hour and 40 during the PM peak hour.

CITY OF ELK GROVE ROADWAYS

The following roadway segments would operate unacceptably at LOS E or F under cumulative development conditions, both *without and with the Project:*

- Elk Grove Boulevard (Eastbound) – Elk Grove-Florin Road to Waterman Road (LOS E during the PM peak hour)
- Elk Grove Boulevard (Westbound) – Elk Grove-Florin Road to Waterman Road (LOS E during the AM and PM peak hours)
- Grant Line Road (Eastbound) – SR 99 to East Stockton Boulevard (LOS E during the PM peak hour)
- Grant Line Road (Westbound) – SR 99 to East Stockton Boulevard (LOS E during the AM peak hour)
- Laguna Boulevard (Eastbound) – Big Horn Boulevard to East Stockton Boulevard (LOS F during the PM peak hour)
- Laguna Boulevard (Westbound) – Big Horn Boulevard to East Stockton Boulevard (LOS E during the AM and PM peak hours)
- Sheldon Road (Eastbound) – East Stockton Boulevard to Elk Grove-Florin Road (LOS E during the PM peak hour)
- Sheldon Road (Westbound) – East Stockton Boulevard to Elk Grove-Florin Road (LOS F during the AM peak hour and LOS E during the and PM peak hour)

The sections of Elk Grove Boulevard, Grant Line Road, Laguna Boulevard, and Sheldon Road identified above are constructed to their General Plan configuration. Additional right-of-way for expanding these roadways is not available without impacting adjacent development. All of these

segments were identified in the General Plan Background Report as operating worse than LOS D. Consistent with Policy CI-14 (see Regulatory Framework above), the City recognizes that LOS D may not be achieved on some roadway segments. Since these roadways are constructed to their General Plan designation, they are consistent with Policy CI-14.

As shown in Table 3.11-4, the addition of the Project would not result in any unacceptable roadway operations (i.e., LOS E or F) on City roadways, I-5, or SR-99. For those segments that would operate unacceptably both with and without the Project, the Project would not increase the volume-to-capacity ratio by 0.05 or more compared to the adopted General Plan. Therefore, this would be a less than significant impact.

SR-99 AND I-5

As documented under existing conditions, congested conditions occur on SR-99 and I-5 due to bottlenecks that cause vehicle queuing on SR-99 and I-5 during the morning and evening peak periods. The addition of the Project will exacerbate these conditions.

To mitigate impacts based on the Caltrans evaluation criteria, subsequent projects should pay their fair-share of the cost for mobility enhancements consistent with those identified in the most current version of the SR-99 & Interstate 5 CSMP. Table 13 of the CSMP identifies that the construction of bus/carpool lanes on I-5 from US 50 to Elk Grove Boulevard is fully funded. Another improvement that would improve SR-99, and potentially I-5, operations is construction of carpool lanes on I-5 from Elk Grove to the San Joaquin County line; this is identified as a visionary project in Table 14 of the CSMP with no estimate of cost or identified method of funding. The CSMP does not identify capital projects in either Table 13 or 14 to add additional lanes or other improvements on SR-99 in the vicinity of the City that would improve the existing and planned congested conditions. Construction and implementation of necessary improvements is uncertain because the implementation of such improvements is outside of the City's jurisdiction. While implementation of capital and operational mobility enhancements would lessen the significant impact associated with I-5 and SR-99, there is not an enforceable fee program that has been adopted by Caltrans and there is no mechanism in place to collect adequate funds for the improvements and ensure that the funds are used to construct the necessary improvements. Consequently, the mitigation is not feasible.

In addition, even with implementation of capital and operational mobility enhancements, some impacts would still remain significant because acceptable levels of service will not be achieved as indicated by the Concept LOS on SR-99 and I-5, which is LOS F in the study area.

Successful implementation of some of the proposed improvements identified in the CSMP will require the cooperation of third party agencies (Caltrans, Sacramento, County, or City of Sacramento) over which Elk Grove has no control. For this latter reason, Elk Grove is conservatively acknowledging the possibility that, despite its own commitment to work with Caltrans, mutually acceptable accommodation may not be reached. General Policy CI-2 relates to coordination and participation with the City of Sacramento, Sacramento County, and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations, including joint transportation planning efforts, roadway construction and funding. Consistent with Policy CI-2, the City should continue to work with Caltrans and other affected agencies to address operational conditions on SR-99. This commitment to improving operation on SR-99 in the City is also

demonstrated with Policy CI-11, related to implementing improvements to I-5 and SR-99, and Policy CI-12, related to the Capital SouthEast Connector project. However, since SR-99 is under the jurisdiction of Caltrans, these facilities are outside the City's jurisdiction to implement improvements that would mitigate these impacts and a funding program to collect and implement funds from subsequent development projects is not in place. Therefore, these impacts would be significant and unavoidable.

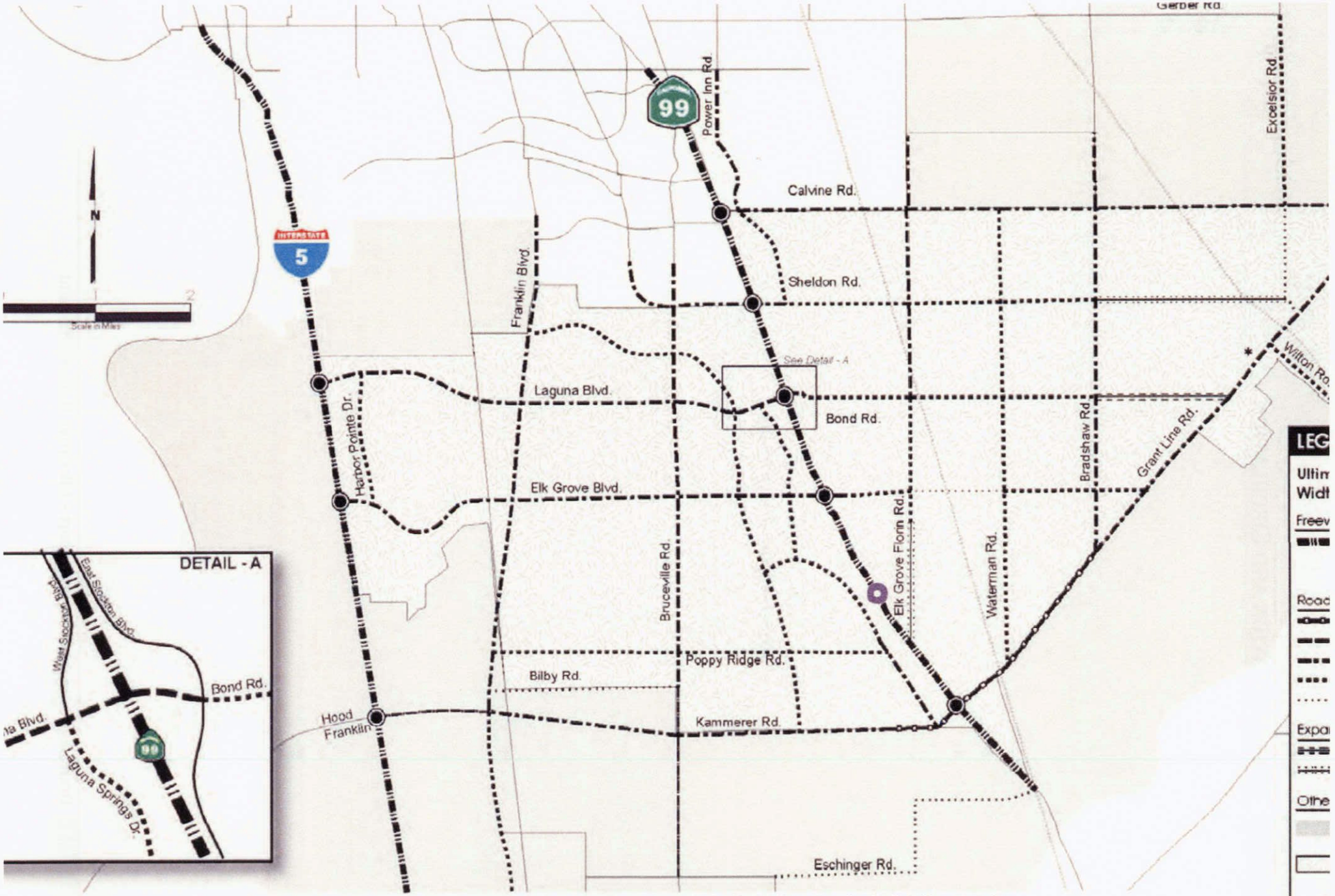
Impact 3.11-2: The Project would not substantially increase hazards due to a design feature. (less than significant)

There are no specific development projects associated with the Housing Element, thus potential projects cannot be reviewed for potential hazards associated with design features. Subsequent development plans for the opportunity sites will need to be configured in a manner that safely interfaces with the characteristics of the existing street system. As subsequent development projects are proposed on the opportunity sites, each project will be reviewed for consistency with relevant General Plan policies that address roadway safety and emergency access, including CI-4, CI-16, CI-18, CI-21, CI-22, and CI-23 and the City's standards and specifications for streets, sidewalks, and roadways, which address potential design hazards including sight distance, driveway placement, and adequate signage and striping. Implementation of the General Plan policies and the City's standards and specifications that address safety associated with transportation and circulation will ensure that potential hazards associated with a design feature are reduced to a less than significant level.

Impact 3.11-3: The Project would not conflict significantly with adopted policies, plans, or programs regarding bicycle, pedestrian, or transit facilities, or otherwise decrease the performance or safety of such facilities. (less than significant)

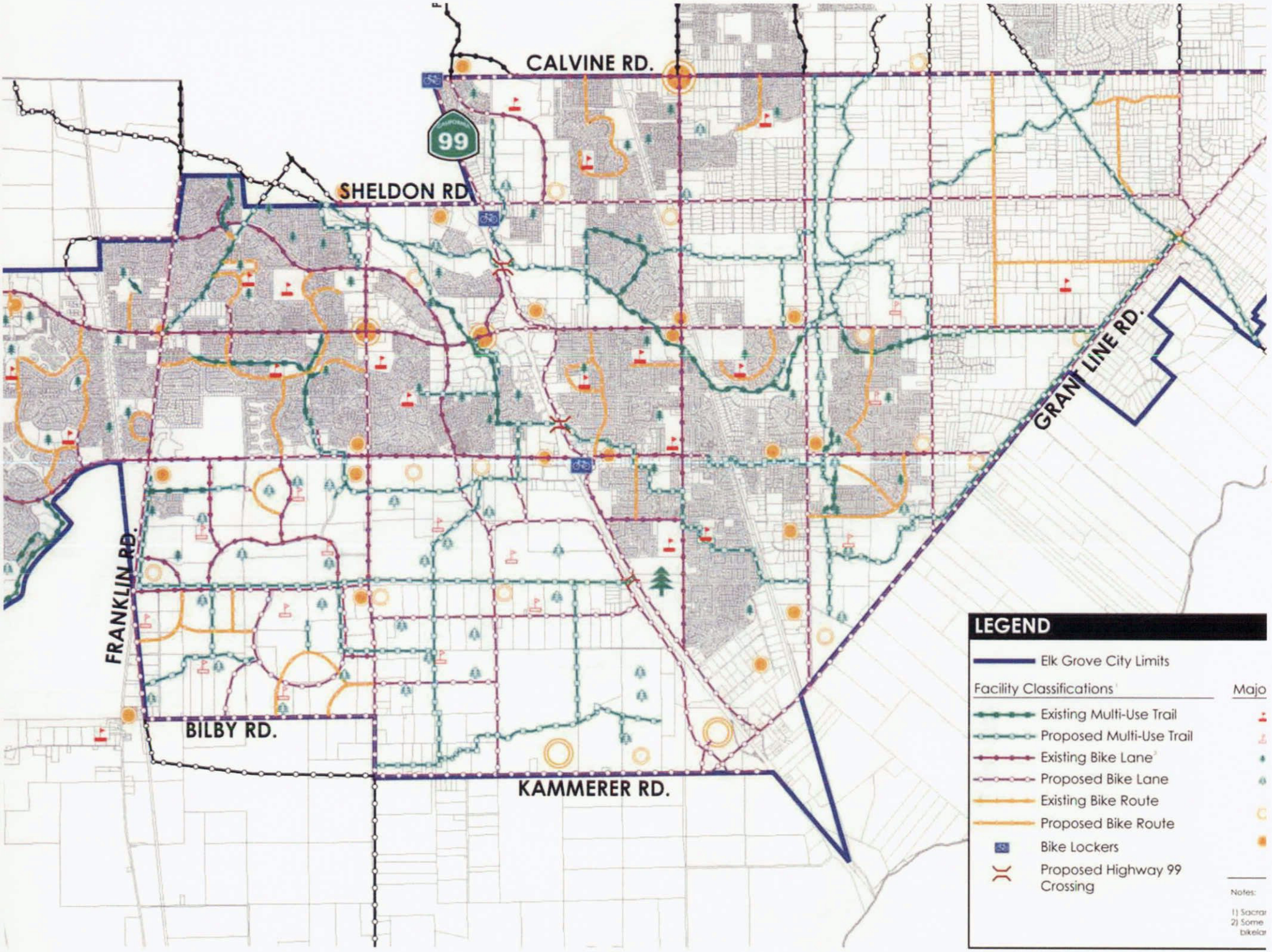
Site plans for subsequent development projects would be reviewed for conformance with multi-family design guidelines as appropriate. Implementation of the Project would not disrupt or interfere with existing bicycle, pedestrian, or transit facilities, and would not disrupt or interfere with the implementation of any planned bicycle, pedestrian, or transit facilities. The Project would locate higher density residential uses along major transportation facilities with existing transit service, along planned transportation corridors that will support transit service, and in areas that are being planned to accommodate the planned extension of light rail. Subsequent projects would be required to provide connections to bicycle and pedestrian facilities in compliance with General Plan policies and the City's *Bicycle and Pedestrian Master Plan*. Compliance with General Plan policies CI-3 through CI-7 along with associated action items, which encourage the development and usage of alternative transportation, would minimize potential impacts to alternative transportation, including bicycle, pedestrian, and transit facilities, to a less than significant level.

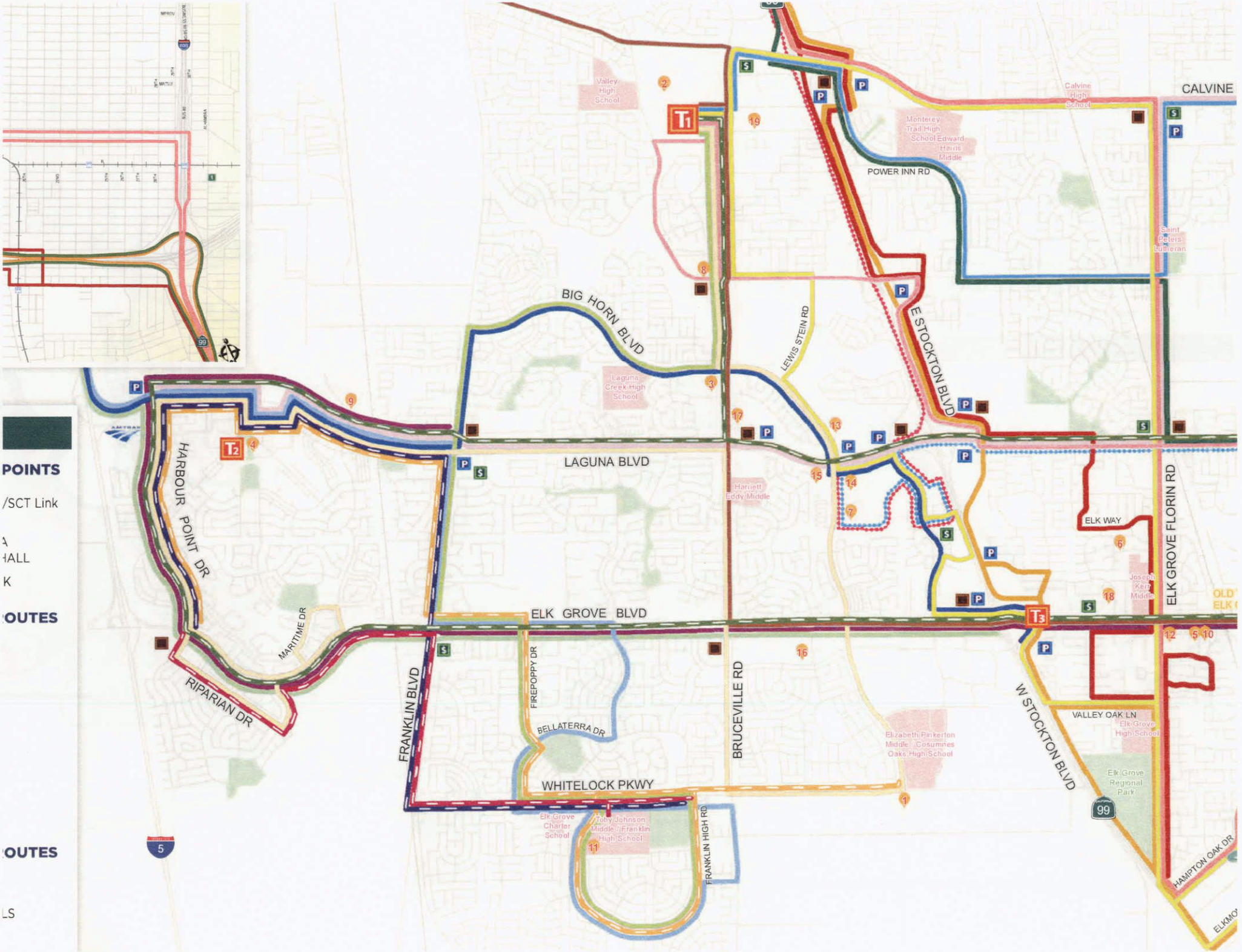
This page left blank intentionally.



1) Alignments for future roadways are conceptual and subject to change based on detailed alignment studies.
2) Roadways outside the Elk Grove city limits are shown for illustrative purposes only, based on City and County of Sacramento General Plans.
3) Future Light Rail alignments are not shown on this map.

* See Circulation Element for policies related to width of Grant Line Road in the "Sheldon Town" area.


CALVINE RD.
99
SHELDON RD.
GRANT LINE RD.
FRANKLIN RD.
BILBY RD.
KAMMERER RD.
LEGEND
Elk Grove City Limits
Facility Classifications
Existing Multi-Use Trail
Proposed Multi-Use Trail
Existing Bike Lane
Proposed Bike Lane
Existing Bike Route
Proposed Bike Route
Bike Lockers
Proposed Highway 99 Crossing
Majo
Notes:


CALVINE
POWER INN RD
BIG HORN BLVD
LEWIS STEIN RD
E STOCKTON BLVD
LAGUNA BLVD
ELK GROVE FLORIN RD
ELK WAY
HARBOUR POINT DR
MARITIME DR
RIPARIAN DR
ELK GROVE BLVD
FRANKLIN BLVD
FIREPOPPY DR
BELLATERRA DR
BRUCEVILLE RD
W STOCKTON BLVD
VALLEY OAK LN
WHITELOCK PKWY
FRANKLIN HIGH RD
HAMPTON OAK DR
Valley High School
Calvine High School
Monterey Trail High School
Edward Harris Middle
Saint Peters Lutheran
Laguna Creek High School
Harriett Eddy Middle
Joseph Kerr Middle
Elizabeth Pinkerton Middle
Cosumnes Oaks High School
Elk Grove High School
Elk Grove Regional Park
Elk Grove Charter School
Toby Johnson Middle
Franklin High School
T1
T2
T3
99
5

This section describes the existing setting, regulatory framework, impacts associated with wastewater services, water services, stormwater and drainage infrastructure, and solid waste disposal that are likely to result from Project implementation, and measures to reduce potentially significant impacts to wastewater, water supplies, stormwater and drainage, and solid waste.

This section is based in part on the following documents, reports and studies: Solid Waste Information System (CalRecycle 2013), Jurisdiction Diversion/Disposal Rate Summary 2007 – Current (CalRecycle 2011), *Storm Drainage Master Plan Volume I* (City of Elk Grove 2011), *2010 Urban Water Management Plan* (Elk Grove Water District (EGWD) 2011), *Sewer System Capacity Plan 2010 Update Executive Summary* (Sacramento Area Sewer District (SASD) 2011a), *Sewer System Capacity Plan 2010 Update* (SASD 2011b), *Zone 40 Water Supply Master Plan* (Sacramento County Water Agency (SCWA) 2005), *Draft 2010 Urban Water Management Plan* (SCWA 2011), *2020 Master Plan, Final Executive Summary* (Sacramento Regional County Sanitation District (SRCSD) 2008), *2012 State of the District Report* (SRCSD, 2012), and the *Sewer System Management Plan* (SRCSD, 2013). Finally, solid waste diversion information was provided from the following website: http://www.calrecycle.ca.gov/ LGCentral/reports/diversion program/JurisdictionDiversionPost2006.aspx.

Comments received in response to the NOP identified concerns regarding public utilities. The comments are located in Appendix A.

3.12.1 WASTEWATER SERVICES

EXISTING SETTING

Wastewater Conveyance

The City lies within the sanitary sewer collection service area of the Sacramento Area Sewer District (SASD), and the sanitary sewer treatment boundaries of the Sacramento Regional County Sanitation District (SRCSD). SASD provides wastewater collection services in the urbanized unincorporated area of the County, in the cities of Citrus Heights, Elk Grove, and Rancho Cordova, and in a portion of the cities of Sacramento and Folsom. SASD owns, operates and maintains a network of 4,200 miles of main line and lower lateral pipes within a 268 square-mile area (SASD, 2013).

Once collected in the SASD system, sewage flows into the Sacramento Regional County Sanitation District (SRCSD) interceptor system, where it is conveyed to the Sacramento Regional Wastewater Treatment Plant near Elk Grove. The existing Elk Grove trunk line extends southeast from the Sacramento Regional Wastewater Treatment Plant (SRWTP) influent diversion structure to Laguna Boulevard, then parallel to SR 99 along E. Stockton Boulevard extending close to the southern City boundary.

The SASD *Sewer System Capacity Plan* (SCP) estimates the future capital needs of the SASD trunk sewer system, both for capacity relief projects for the existing system and expansion projects to serve newly developed areas. Table 3.12-1 identifies the existing and anticipated capacity need calculated in equivalent single-family dwelling units (ESDs) for SASD services.

TABLE 3.12-1: 2010 SCP PLANNING SCENARIOS AND PROJECTED ESDS

SASD HYDRAULIC MODEL	*SCP PLANNING SCENARIO*	*ESDs*[1]
2010 Model	Year 2010 Condition (Existing)	400,260
2020 Model	Year 2020 Condition (Mid-Range Planning)	423,130
Buildout Model	Buildout Condition (Long Range Planning)	1,101,680

Source: SASD SCP 2011a, pg. 2

Wastewater Treatment

Wastewater treatment for the City is provided by the Sacramento Regional County Sanitation District (SRCSD). SRCSD provides wastewater services for the residential, commercial, and industrial communities in metropolitan Sacramento County, and to the City of West Sacramento in Yolo County. SRCSD owns and operates the regional wastewater conveyance system and the SRWTP. SRCSD's system includes:

- Miles of Pipeline: 177 miles
- Pump Stations: 9
- 3,500-acre wastewater treatment facility
- Population Served: Approximately 1.4 million in the greater Sacramento area
- Number of Customer Accounts: 577,458 (SRCSD 2012, pg 4).

SRCSD's contributing agencies each collect wastewater, while SRCSD is responsible for major conveyance, wastewater treatment, and wastewater disposal. SRCSD collects wastewater from its contributing agencies at various influent diversion locations and conveys the wastewater via its pipeline system to the existing SRWTP. The SRWTP is on a 3,500-acre site located between Franklin Boulevard and I-5, north of Elk Grove and south of Sacramento. The SRWTP has a permitted capacity of 181 million gallons per day (mgd) of dry weather flow and 391 mgd for peak wet weather flow. The SRWTP has an annual effluent flow of 139,941 acre-feet, with an average dry weather flow of 115 mgd and a peak wet weather flow of 259 mgd.

The *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan* (2020 MP) for the SRWTP provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements in the SRCSD service area through the year 2020. The SRWTP 2020 MP uses SACOG population projections multiplied by per capita flow and load values to determine future facilities needs (SRCSD, 2008, p. 14). According to the 2020 MP, the reliable capacity of the existing facilities is limited, based on hydraulic considerations, to an equivalent 207-mgd ADWF. This capacity is insufficient to accommodate the projected 218-mgd ADWF in the year 2020. In addition, the permitted capacity to treat wet peak 24-hour weather flows of 392 mgd is insufficient to accommodate the projected 434 mgd PWWF in the year 2020. (SRCSD 2008, pg.15). Table 3.12-2 shows the anticipated capacity need projected through 2020 and also identifies the capacity of flows the SRWTP is designed to treat at buildout of the SRWTP facilities.

The SRWTP has been designed with multiple storage basins so that peak flows can be diverted and stored prior to treatment. This allows the SRWTP to store peak wet weather flow, then treat the wastewater later when the storm flows subside. This reduces the level of idle capacity and also allows the SRWTP to effectively accommodate a larger amount of flows than its peak treatment levels, by storing the flows and then treating the flows when the daily flows have returned to below peak levels.

TABLE 3.12-2: POPULATION BASED FLOW PROJECTIONS (ALL FLOWS IN MILLION GALLONS PER DAY)

YEAR	AVERAGE DRY WEATHER (ADWF)[1]	AVERAGE DAY MAXIMUM MONTH (ADMMF)	PEAK HOURLY 2-YEAR STORM (PHWWF)[2]
2000	154[3]	220[3]	312[3]
2005	174	247	334
2010	196	279	362
2015	210	299	392
2020	218	311	408
Buildout Capacity[4]	*350*	*450*	*833[5]*

(1) ADWF defined as the average flow occurring over the three consecutive lowest flow months of the year.
(2) Wet weather flows are from Regional Interceptor 2000 Master Plan.
(3) Actual data.
(4) Capacity based on "buildout" of the SRWTP facilities. Not a projection of service area wastewater flows/loads at buildout.
(5) Collection system build-out flows based from Regional Interceptor 2000 Master Plan.

SOURCE: SRCSD 2008, PG 14.

REGULATORY SETTING

FEDERAL AND STATE

Clean Water Act (CWA) / National Pollutant Discharge Elimination System (NPDES) Permits

The CWA is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

The CWA regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. Section 402 of the Act creates the NPDES regulatory program which makes it illegal to discharge pollutants from a point source to the waters of the United States without a permit. Point sources must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

Permit requirements for treatment are expressed as end-of-pipe conditions. This set of numbers reflects levels of three key parameters: (1) biochemical oxygen demand (BOD), (2) total suspended solids (TSS), and (3) pH acid/base balance. These levels can be achieved by well-operated sewage plants employing "secondary" treatment. Primary treatment involves screening and settling, while secondary treatment uses biological treatment in the form of "activated sludge."

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, so it eventually goes to a sewage treatment plant. Although not regulated under NPDES, "indirect" discharges are covered by another CWA program called pretreatment. "Indirect" dischargers send their wastewater into a

city sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering surface water.

SRCSD's current permit was issued by the Central Valley Regional Water Quality Control Board (Regional Board), Order No. R5-2010-0114-01. The NPDES Permit, No. Ca0077682, regulates the wastewater effluent quantity and quality upon discharge.

LOCAL

Sacramento Area Sewer District

Sacramento Area Sewer District (SASD) is the largest of the three contributing agencies of the SRCSD. Wastewater from SASD is discharged into the SRCSD interceptor system and treated at SRCSD's SRWTP. SASD also provides wastewater conveyance for the Rio Cosumnes Correctional Center (RCCC) and serves the Delta communities of Courtland and Walnut Grove with separate collection and treatment systems.

Sewer System Capacity Plan 2010 Update - The primary objective of the Sacramento Area Sewer District (SASD) 2010 Sewer System Capacity Plan (2010 SCP) update was to develop a high-level planning and dynamic sewer capacity plan that addresses existing, midrange, and buildout sewer capacity needs. Existing capacity needs are based on SASD's current sewer system conditions. The mid-range capacity needs are based on plans to provide sewer service to SASD's service area within the next 10 years. The buildout capacity needs are based on providing sewer service to the entire SASD service area.

The SCP uses the information shown in Table 3.12-3 to determine the ESD density for future capacity need (SASD SCP 2011b, Figure 2-3).

TABLE 3.12-3: 2010 SCP LAND USE CATEGORIES AND DESIGN ESD DENSITIES

DESCRIPTION	*ESDS PER ACRE*
Medium Low Density Residential	10
Medium Density Residential	15
Medium High Density Residential	22
High Density Residential	30
Corridors and Town Centers	20
Open Space (non-sewered areas) • Elk Grove Rural Residential • Parks, greenbelts, public open spaces, resource conservation area • Manmade lakes, storm water detention ponds, storm water canals, drainage parkway, detention basins • Flood plains, waterways, levees, drainage ditches, irrigation canals • American River Parkway, nature preserve, urban reserves (non-sewered), wetland buffers, wastelands • Bike path corridors, landscape corridors • Cemeteries • Roadway, streets	0
All Other Land Uses: • Residential • Commercial/Office • Industrial • Public/Quasi-public/Schools • Mixed/Special Planning Area/Urban Reserve	6

SOURCE: SASD SCP 2011A, PG. 3

Sacramento Regional County Sanitation District

As previously discussed, SRCSD provides public wastewater treatment and disposal in the unincorporated and urbanized portions of Sacramento County under the direction of the County of Sacramento's Water Quality Division. SRCSD has prepared the following documents to guide the development of wastewater facilities in Sacramento County:

Regional Interceptor Master Plan 2000 - The SRCSD has prepared a long-range master plan for the large diameter interceptors that transports wastewater to the SRWTP and includes interceptor upgrades/expansions to accommodate anticipated growth through 2035.

Regional 2020 Master Plan - The 2020 MP for the SRWTP provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements through the year 2020. The key goals of the 2020 Master Plan are to provide sufficient capacity to meet growth projections and an orderly expansion of SRWTP facilities to comply with applicable water quality standards and to provide for the most cost-effective facilities and programs from a watershed perspective.

The 2020 MP states that the master planning capacity is based on conservative criteria to initiate the timing of new facilities in sufficient time to allow for permitting and environmental documentation, preliminary design, final design, and construction. The master planning capacity can be exceeded, as necessary, while the SRWTP continues to meet all applicable NPDES permit requirements. For example, the master planning design criteria (and capacity) may be exceeded for individual treatment processes for certain periods of time during the planning horizon, and at times when new projects are just coming on line.

The 2020 MP indicates that wastewater facilities should be sufficiently flexible to accommodate additional growth beyond the planning period. The 3,500-acre SRWTP site has been master planned to accommodate a mirror image buildout of the existing facilities of 350-mgd ADWF of conventional and advanced treatment capacity. The 2020 MP includes cost estimates for future 2020 MP projects and projects the timing of the projects based on anticipated population growth in its service area. Not all facilities necessary to treat the master planned capacity or the projected 2020 flow-rates need to be constructed at the same time. Generally, facility expansion is phased in five to ten year increments over the planning period. These increments are large enough to provide a reasonable economy of scale and yet small enough to minimize the size of potentially idle facilities (SRCSD 2008, pg 15).

NPDES Permit - In 2010, the Regional Board issued a new discharge permit to SRCSD for the SRWTP. The discharge permit requires treatment facility upgrades for ammonia removal, nitrate removal, filtration, and additional disinfection.

SRCSD filed an appeal to the State Water Resources Control Board (State Board) requesting it review the Regional Board's decision on the discharge permit. In December 2012, the State Board conducted a hearing and upheld the discharge permit, thereby concluding SRCSD's regulatory appeals process. SRCSD also filed a lawsuit in Sacramento Superior Court in December 2011. The interested parties agreed to a "stay" on some of the requirements pending the State Board's review of SRCSD's appeal. After the State Board issued its final order in December 2012, the litigation process was reinitiated. In April 2013, a partial settlement of the litigation was reached. In the settlement, SRCSD dropped its challenge to the permit provisions requiring removal of

ammonia and nitrate from its treated effluent and received an additional two years to comply with the filtration and disinfection requirements (by 2023). However, SRCSD continues its legal challenge to those requirements mandating new filtration and disinfection facilities. It is anticipated that a hearing in Superior Court on the case will occur in spring 2014.

The discharge permit requires implementation of a significant number of special studies and pollution prevention plans. During 2012, SRCSD began implementing the 12 approved studies and plans. Three other special studies and pollution prevention plans are still under review by the Regional Board.

SRCSD built the Advanced Treatment Technology Pilot Project (Pilot Project) to evaluate and determine which treatment technologies would meet the new discharge permit requirements most effectively. SRCSD is operating the Pilot Project and evaluating the performance of each of the piloted technologies (SRCSD 2013).

City of Elk Grove General Plan

The General Plan contains the following policies and actions that are relevant to wastewater aspects of the Project:

Policy PF-1 Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

Policy PF-2 The City shall coordinate with outside service agencies including water and sewer providers, the Elk Grove Community Services District, and the Elk Grove Unified School District – during the review of plans and development projects.

Policy PF-8 Sewage conveyance and treatment capacity shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City's satisfaction.

PF-8-Action 2 The following shall be required for all subdivisions to the extent permitted by state law:

- Sewage/wastewater treatment capacity shall be available at the time of tentative map approval.
- The agency providing sewer service to the subdivision shall demonstrate prior to the approval of the Final Map by the City that sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects using the same conveyance lines, and projects which have received sewage treatment capacity commitment.
- Onsite and offsite sewage conveyance systems required to serve the subdivision shall be in place prior to the approval of the Final Map, or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.

- Sewage conveyance systems within the subdivision shall be in place and connected to the sewage disposal system prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.

Policy PF-9 Development along corridors identified by sewer providers in their Master Plan as locations of future sewage conveyance facilities shall incorporate appropriate easements as a condition of approval.

Policy PF-10 The City shall strongly discourage the extension of sewer service into any area designated for Rural Residential land uses. Sewers shall not be used to accommodate lot sizes smaller than 2 (two) gross acres in the Rural Residential area, and lot sizes shall be large enough to accommodate septic systems. This policy shall not be construed to limit the ability of any sewer agency to construct "interceptor" lines through or adjacent to the Rural Residential area, provided that no "trunk" or service lines are provided within the Rural Residential area.

Policy PF-13 Residential development on lots smaller than two (2) gross acres shall be required to connect to public sewer service. This policy shall not apply to lots smaller than 2 gross acres in the Rural Residential land use category which existed as legal lots as of the date of adoption of this General Plan; these lots shall not be required to connect to public sewer service as a condition of development.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on the environment associated with Utilities if it will:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

2. Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; and/or

3. Result in a determination by the wastewater treatment provider which serves or may serve the project that is has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

IMPACTS AND MITIGATION MEASURES

Impact 3.12-1: The Project would not exceed wastewater treatment capacity, require the construction of new wastewater treatment facilities, or exceed the requirements of the RWQCB. (less than significant)

Implementation of the proposed Housing Element does not, in and of itself, construct new housing in the City. However, the proposed Housing Element does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the

provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing.

Implementation of the Housing Element would increase the number of dwelling units in the City by up to 8,843 units, an increase of 4,875 over development anticipated by the adopted General Plan, as shown in Table 2.0-2 in Section 2.0 of this Draft EIR. This increase of 4,875 housing units would result in a potential population increase of up to 15,680 persons when compared to the adopted General Plan (see Table 3.9-4).

According to the Elk Grove Water District Urban Water Management Plan, the average wastewater flow in the City is 135 gallons per day per person (UWMP, pg. 28). Based on this, the addition of 15,680 persons would increase the amount of wastewater generated in the City by 2.12 mgd. Wastewater generated by future development provided under the Housing Element would be conveyed to the SRWTP near Elk Grove for treatment and disposal.

According to the 2012 SRCSD State of the District Report, the *current* average dry weather wastewater flow into the WWTP is 115 mgd, and the peak wet weather flow is 259 mgd. The Project would add an additional 2.12 mgd average daily dry weather flow to the WWTP. The Project's additional flows to the WWTP would not cause an exceedance of the plant's permitted design capacity of 181 mgd dry weather flow and 391 mgd peak wet weather flow.

Subsequent development under the Housing Element would be subject to the Elk Grove General Plan policies that assist in the provision of wastewater conveyance and treatment facilities. Policy PF-1 requires that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels. Policy PF-2 requires that the City shall coordinate with outside service agencies including water and sewer providers, the Elk Grove Community Services District, and the Elk Grove Unified School District – during the review of plans and development projects. Policy PF-8 requires that sewage conveyance and treatment capacity be available in time to meet the demand created by new development, or be assured through the use of bonds or other sureties to the City's satisfaction. PF-8-Action 2 requires that sewage/wastewater treatment capacity be available at the time of tentative map approval and the agency providing sewer service to the subdivision demonstrate prior to the approval of the Final Map by the City that sufficient capacity be available to accommodate the subdivision plus existing development, and other approved projects using the same conveyance lines, and projects which have received sewage treatment capacity commitment. PF-8-Action 2 also requires that onsite and offsite sewage conveyance systems be in place prior to the approval of the Final Map, or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act and sewage conveyance systems be in place *and connected* to the sewage disposal system prior to the issuance of any building permits. Policy PF-9 requires that developments along corridors identified by sewer providers in their Master Plan as locations of future sewage conveyance facilities incorporate appropriate easements as a condition of approval. Finally, Policy PF-13 requires all residential development on lots smaller than two gross acres connect to public sewer service.

The policies and actions in the Elk Grove General Plan would assure that wastewater treatment and infrastructure is available prior to the construction of new housing units.

The Sacramento Regional County Sanitation District is responsible for implementation of all federal and state wastewater treatment requirements. In December 2010, the Central Valley Water Board

issued a new discharge permit for SRCSD. The discharge permit contained very strict requirements resulting in the need to construct significant new treatment processes at the Sacramento Regional Wastewater Treatment Plant. In adopting the discharge permit, the Central Valley Water Board required the Sacramento region to move to a highly advanced, or "tertiary," treatment process. Citing possible effects on the Delta ecosystem from ammonia contained in the discharge and concerns over public health regarding pathogens, the 2010 discharge permit was one of the most restrictive wastewater treatment permits ever issued in the State of California. New requirements to remove ammonia and nitrate, along with filtration and enhanced disinfection to inactivate pathogens, were included in the permit.

Concerned about the rationale behind some of the requirements in the 2010 discharge permit, SRCSD filed an appeal to the State Water Resources Control Board requesting it review the Central Valley Water Board's decision on the discharge permit. The State Board upheld the Permit in 2012.

While waiting for a decision on the permit appeal by the State Board, in December 2011 SRCSD filed a lawsuit in Sacramento Superior Court seeking resolution on the permit matter. In April 2013, a partial settlement of the litigation was reached. In the settlement, SRCSD dropped its challenge to the permit provisions requiring removal of ammonia and nitrate from its treated effluent and received an additional two years to comply with the filtration and disinfection requirements (by 2023). However, SRCSD continues its legal challenge to those requirements mandating new filtration and disinfection facilities. It is anticipated that a hearing in Superior Court on the case will occur in spring 2014.

On October 4, 2013, the Central Valley Water Board adopted an amendment to SRCSD's 2010 discharge permit that will result in more favorable conditions for SRCSD and its ratepayers as SRCSD implements the required large-scale WWTP upgrades, now known as the EchoWater Project. This amendment results from the partial settlement reached between SRCSD and the State and Regional Water Board earlier in 2013.

The Water Board revised the discharge permit in the following areas:

- Revised the requirements for two disinfection byproducts that will be generated when the disinfection process changes as part of the EchoWater upgrades. It was determined these byproducts can be effectively assimilated in the Sacramento River without exceeding applicable water quality objectives.
- Removed the final effluent limitations for NDMA (nitrosodimethylamine) because those limits were based on data that has since been determined to be unreliable due to analytical difficulties.

These revisions to the discharge permit allow SRCSD to pursue cost-effective disinfection processes.

As described above, the wastewater generated by development of all housing sites identified in the Housing Element would not exceed the treatment capacity of the SRCSD WWTP. As such, the Project would not require the construction of any new wastewater treatment facilities or the expansion of any existing facilities. Any future housing that is constructed as a result of Housing Element implementation would be required to adhere to the wastewater treatment requirements of the City and RWQCB. The Housing Element does not propose any policies or programs that would remove these requirements.

The SRCSD is in the process of implementing a range of system improvements in order to comply with the 2010 discharge permit by 2023. Implementation of the Project would not impair SRCSD's ability to implement the required WWTP system improvements or comply with the requirements of the 2010 discharge permit. As such, the Project would result in a **less than significant** impact to wastewater treatment capacity and compliance with applicable water treatment standards. No mitigation is required.

3.12.2 WATER SUPPLIES

The City is serviced by two different agencies for domestic water use. The Elk Grove Water District (EGWD) provides retail water supplies to areas of the City east of State Route 99, south of Sheldon Road to the City's southern boundary at Grant Line Road. The Sacramento County Water Agency (SCWA) provides wholesale water to the EGWD, and provides domestic retail water supplies to areas of the City west of State Route 99. This area is part of SCWA Zone 41's South Service Area. A small area of the City, north of Sheldon Road and east of State Route 99, is served by SCWA Zone 41's Central Service Area. Both the EGWD and the SCWA Zone 41 receive wholesale water supplies from SCWA's Zone 40.

WATER SERVICE AREAS

Elk Grove Water District

As described above, portions of the City are served by the Elk Grove Water District (EGWD), which is owned and operated by Florin Resource Conservation District (FRCD). EGWD has two service areas, called Tariff Areas, which are supplied with pumped groundwater and treated conjunctive use (groundwater and surface water) water supplies that are purchased from the Sacramento County Water Agency (SCWA). EGWD relies primarily on groundwater as the source of supply for both service areas (EGWD, pg. 21). The EGWD service areas cover approximately 13 square miles and are bounded by Sheldon Road to the north, State Route 99 to the west, Grant Line Road to the east, and the Union Industrial Park to the south. The differentiation between the service areas is based on the separate water suppliers: Tariff Area No. 1 is supplied water from EGWD's groundwater wells and Tariff Area No. 2 is supplied with water purchased wholesale from SCWA.

Sacramento County Water Agency

SCWA is the wholesale water supplier for EGWD and provides the water supplies and water system infrastructure. The City is within Zone 40 of the SCWA. Zone 40 implements SCWA's conjunctive use program in the Central Sacramento Region as part of an effort which began in 1986. The creation of Zone 40 empowered SCWA to establish fees, charges, credits, and regulations for the wholesale supply of water to zones within the SCWA.

Zone 41 of the SCWA was created in June 2000 to provide retail and wholesale water services within its existing water retail service areas. Zone 40 is the primary source of financing to staff the conjunctive use program and construct the needed capital facilities to implement surface water, groundwater and recycled water use. All development projects in the City are be required to pay the necessary Zone 40 Development Fees to further the conjunctive use program in the region. Zone 41's cost of treatment and conveyance is passed on to EGWD, which owns and operates the local water distribution system and retails the water to its customers. EGWD's retail water rates pay for the Zone 41 wholesale supply as well as EGWD's maintenance and operations costs.

WATER DEMAND

Elk Grove Water District

The total water demand for the EGWD is anticipated to be 10,500 acre-feet per year (AFY) by 2035. EGWD plans to implement a variety of Demand Measurement Measures (DMM) with the goal of reducing water use to comply with the Senate Bill X7-7, Water Conservation Bill. EGWD has set a water use reduction goal of 20 percent by 2020, reducing per capita usage from a current average use of 253 gallons per capita day (gpcd) to 202 gpcd by 2020. An interim target has also been set for reducing the per capita water use of 227 gpcd by 2015.

Table 3.12-4 provides a summary of EGWD water demands through the year 2035. However, this demand does not take into account the reductions from implementing SBX7-7 over the same area and period of time.

TABLE 3.12-4: EGWD EXISTING AND PROJECTED WATER DEMAND

YEAR	TARIFF AREA # 1		TARIFF AREA # 2		TOTAL WATER DEMAND (AFY)
	# OF ACCOUNTS	VOLUME (AFY)	# OF ACCOUNTS	VOLUME (AFY)	
2005	7,610	5,881	3,934	2,516	8,397
2010	7,931	3,785	4,112	2,935	6,720
2015	8,130	6,205	4,825	3,570	9,775
2020	9,325	5,940	5,537	3,640	9,580
2025	9,325	5,940	6,248	4,100	10,040
2030	9,325	5,940	6,960	4,560	10,500
2035	9,325	5,940	6,960	4,560	10,500

SOURCE: EGWD 2010 UWMP, TABLES 7 THROUGH 16.

Sacramento County Water Agency Zone 41

The total water demand for the SCWA Zone 41 is anticipated to be 66,246 AFY by 2035. The water demands through the year 2035 are shown in Table 3.12-5, and are estimated based on the selected gpcd target chosen by SCWA, as described in Section 3.2 of the SCWA Zone 41 Urban Water Management Plan.

TABLE 3.12-5: SCWA ZONE 41 EXISTING AND PROJECTED WATER DEMAND

YEAR	METERED		NOT METERED		TOTAL WATER DEMAND (AFY)
	# OF ACCOUNTS	VOLUME (AFY)	# OF ACCOUNTS	VOLUME (AFY)	
2005	26,194	17,682	15,777	14,503	32,185
2010	38,780	23,284	10,341	8,522	31,806
2015	55,782	35,656	3,273	3,760	39,416
2020	68,423	41,087	3,273	3,739	44,826
2025	86,807	51,021	NA	NA	51,021
2030	103,918	58,118	NA	NA	58,118
2035	124,670	66,246	NA	NA	66,246

SOURCE: SCWA ZONE 41 2010 UWMP, TABLES 3-5 THROUGH 3-8.

WATER SUPPLIES

Elk Grove Water District

EGWD relies primarily on groundwater as the source of supply for both service areas, Tariff Area No. 1 and Tariff Area No. 2. Groundwater is supplied to Tariff Area No. 1 by a series of three shallow and four deep wells, which are owned and operated by EGWD. There are normally closed intertie connections with the SCWA. Tariff Area No. 2 is supplied water from the SCWA through a wholesale master water agreement with SCWA. Tariff Area No. 2, which is located within SCWA's Zone 40, uses both groundwater and surface water as sources of water supply. EGWD has an agreement with SCWA to provide the water necessary to serve the Tariff Area No. 2 franchise area. Although SCWA has recently acquired surface water supplies and recycled water, Tariff Area No. 2 is not currently supplied with recycled water and currently does not receive any significant amount of surface water. SCWA is developing substantial surface water supplies as part of the Freeport Regional Water Authority (FRWA), which may become available to Tariff Area No. 2.

The quality of the groundwater supplied by EGWD meets the California Department of Public Health (CDPH) drinking water standards. EGWD provides centralized water quality treatment to remove manganese and provide blending to reduce arsenic concentrations at the Railroad Street Water Treatment Plant for EGWD's four deep wells. EGWD does not provide recycled water to its service areas.

The data in the Table 3.12-6 represents the existing and planned wholesale water supplies that were calculated by EGWD. SCWA is under contract with EGWD to supply 4,560 AFY to the District for Tariff Area # 2. Full use of this supply is not expected to be needed until 2030.

TABLE 3.12-6: EGWD FUTURE WATER SUPPLY (AFY)

WATER SUPPLY SOURCES	*CONTRACTED VOLUME*	*2015*	*2020*	*2025*	*2030*	*2035*
SCWA	4,560	3,570	3,640	4,100	4,560	4,560
EGWD Groundwater	-	6,205	5,940	5,940	5,940	5,940
Total Supply		9,975	9,580	10,040	10,500	10,500

SOURCE: EGWD 2011, P. 21

EGWD pumps groundwater from the South American Subbasin. The groundwater basins underlying the Sacramento County region have been divided into three geographic subareas: (1) North Basin, (2) Central Basin, and (3) South Basin. EGWD overlies and extracts groundwater from the Central Basin from seven wells that range in total depth from 450 to 1,075 feet below ground surface. The public water systems or water service providers that receive water from the Central Basin include EGWD, the California American Water Company, SCWA, the Golden State Water Company, and numerous private landowners who have overlying rights on their property.

According to the EGWD UWMP, the Central Basin is not adjudicated or considered to be in a state of being over drafted. Due to the active planning by water agencies, the basin is not foreseen to be over drafted in the future (EGWD 2011, p. 22).

Groundwater use is regularly monitored within the Sacramento County region. The Sacramento Groundwater Authority (SGA) Basin Management Report that was prepared in 2007-2008, found

that groundwater use in the Central Basin, where EGWD is located, has remained relatively constant at approximately 262,500 AFY during the preceding four years and had a high of 264,860 in 2008. In communication with the other groundwater users from the basin (SCWA, the Golden State Water Company, and the California American Water Company), it is not anticipated that groundwater extraction would have increased in the years of 2009 or 2010, given the dramatic decline in home construction and the depressed local economy. This would indicate a remaining groundwater capacity of approximately 8,140 AFY in regards to the agreed upon sustainable yield of 273,000 AFY for the Central Basin stakeholders (EGWD 2011, p. 22).

The Central Sacramento County Groundwater Master Plan (CSCGMP) was adopted by the SCWA on February 2006. One goal of the CSCGMP was to model the groundwater basin and establish a sustainable annual groundwater yield for the Central Basin. The CSCGMP is the result of the Water Forum process, a decade-long effort involving multiple agencies and stakeholders within the region, and culminated in the negotiation and signing of the Water Forum Agreement. The CSCGMP provides for the long-term protection of groundwater quantity and quality within the region, and contains policies directing the development of surface water supplies, conservation, and other measures to service urban development as it occurs, thereby protecting the sustainable annual groundwater yield threshold of 273,000 AF.

Based upon the Central Basin's total projected water supplies for normal, single-dry, and multiple-dry years over a 20-year projection, as demonstrated by the County's UWMP and GMP, the Central Basin will have sufficient water to meet estimated water demands for the build-out of the EGWD Tariff Area No. 1 and Tariff Area No. 2.

SCWA Zone 40 Water Supplies

All domestic retail water provided by SCWA Zone 41 comes from wholesale supplies provided by SCWA Zone 40. SCWA uses surface water, groundwater, and recycled water as its sources of water supply. Areas inside Zone 40 are served conjunctively with groundwater, surface water, and recycled water.

The surface water supply would come from the American and/or Sacramento Rivers. All surface water supplies require conventional treatment prior to distribution within the City. SCWA's surface water supplies include:

Appropriative Water. In February 2008, the State Water Resources Control Board (SWRCB) approved SCWA's appropriative right permit application to divert water from the American and Sacramento Rivers (Permit 21209). Water under this permit is considered "intermittent water" that is typically available during the winter months of normal or wet years. These flows could range up to 71,000 ac-ft/yr and a long-term average flow of 21,700 AFY is projected. (SCWA 2011, p. 4-1)

SMUD 1 Surface Water Assignment. Under the terms of a three-party agreement (SCWA, SMUD, and the City), and in accordance with SMUD's PSA, the City provides surface water to SMUD for use at two of SMUD's cogeneration facilities (because the cogeneration facilities are located within the City's American River place of use (POU), authorization by SWRCB is not required). SMUD, in turn, will assign 15,000 AFY of its Reclamation CVP contract water to SCWA for M&I use. This CVP contract assignment is complete.

SMUD 2 Surface Water Assignment. SMUD's PSA directs SMUD to assign a second 15,000 AF/year to SCWA and for SCWA to construct groundwater facilities necessary to meet SMUD's dry year water shortages of up to 10,000 AFY. This CVP contract assignment is complete.

"Fazio Water" (CVP Water Public Law 101-514). In April 1999, the SCWA obtained a CVP water service contract pursuant to PL 101-514 that provides a permanent water supply to Zone 40 of 15,000 AFY.

Other Water Supplies. The SCWA enters into purchase and transfer agreements with other entities that currently hold surface water rights in the north Sacramento River Basin.

Purchase of City of Sacramento Water for use in City Place of Use (POU). SCWA's PSA directs the agency to enter into an agreement with the City of Sacramento whereby the City will sell surface water to the SCWA for use in the portion of the Zone 41 service area within Zone 40 boundaries that lies with the City's American River POU.

Groundwater is a vital source of supply for all of Zone 41. Those portions of Zone 41 located outside of Zone 40 and 50 are completely reliant on groundwater. While groundwater currently makes up a substantial portion of the supply within Zone 40, completion of the FRWA project and the *Vineyard Surface* WTP will introduce a significant amount of surface water to complement available groundwater, fully initiating SCWA's conjunctive use program. The objective of conjunctively using surface water and groundwater is to maintain the sustainable yield of the groundwater basin underlying SCWA's service area.

Zone 41 pumps groundwater from the Sacramento Valley Groundwater Basin, North American Subbasin (5-21.64) (Northgate 880 and Arden Park Vista) and the South American Subbasin (5-21.65) (Zone 40 (NSA, CSA, and SSA), Walnut Grove, and Hood).

Table 3.12-7 illustrates Zone 40's current and projected water supply availability through 2035 during a normal water year.

TABLE 3.12-7: SCWA ZONE 40 CURRENT AND PROJECTED NORMAL YEAR WATER SUPPLIES (AFY)

WATER SUPPLY SOURCES	*2010*	*2015*	*2020*	*2025*	*2030*	*2035*
Supplier-produced groundwater to serve Zone 40	35,000	20,000	15,000	20,000	25,000	15,000
Wholesaler- (City of Sacramento) to serve portion of Zone 40	0	0	0	0	9,300	9,300
Supplier-produced surface water to serve Zone 40: U.S. Bureau of Reclamation	12,320	25,000	30,000	35,000	40,000	45,000
Supplier-produced surface water to serve Zone 40: SWRCB Permit 21209	0	10,000	12,500	15,000	17,500	21,700
Other surface water transfers to serve Zone 40	0	0	0	0	0	5,200
Recycled water for Zone 40	1,000	3,000	4,400	4,400	4,400	4,400
Remediated groundwater to serve Rio del Oro in Zone 40	0	0	2,500	5,000	7,500	8,900
Zone 40 Subtotal	*48,320*	*58,000*	*64,400*	*79,400*	*103,700*	*109,500*

WATER SUPPLY SOURCES	*2010*	*2015*	*2020*	*2025*	*2030*	*2035*
Wholesaler- (City of Sacramento) to serve Zone 50	0	779	3,064	5,198	5,198	5,198
Supplier-produced groundwater to serve areas outside of Zone 40	6,000	6,000	6,000	6,000	6,000	6,000
Total	**54,320**	**64,779**	**73,464**	**90,598**	**114,898**	**120,698**

SOURCE: SCWA ZONE 41 2010 UWMP, TABLE 4-4

Water Distribution System

EGWD is responsible for the maintenance and operation of the transmission and distribution mains for Tariff Area No. 1 and the distribution mains for Tariff Area No. 2. The EGWD owns and operates a water treatment plant site that receives water from wells. This treatment plant also includes a pump station and two 1.0 million gallon above-ground water storage tanks. This facility is used to serve the customers within Tariff Area No. 1. The water treatment plant facility is referred to as the Railroad Street Treatment and Storage Facility. EGWD also has a well and water treatment plant in the south end of Tariff Area No. 1. This facility is currently not in service and is classified as a "stand-by" well with the California Department of Public Health (CDPH). This facility is referred to as the Hampton Water Treatment Plant. There is a single water treatment plant within the Tariff Area No. 2 service boundary, which is owned and operated by SCWA. This plant is referred to as the East Elk Grove Groundwater Treatment Plant.

REGULATORY SETTING – WATER SUPPLIES

STATE

Senate Bill 610

Senate Bill (SB) 610 requires that public agencies in a position of approving certain projects check with the water agency proposed to serve the project to determine if there are sufficient water supplies available to accommodate the project. SB 610 applies to projects that meet the following criteria:

- A proposed residential development of more than 500 dwelling units.
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- A proposed hotel or motel, or both, having more than 500 rooms.
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- A mixed-use project that includes one or more of the projects specified above.
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

SB 610 amended Public Resources Code Section 21151.9 to provide that whenever a city or county decides that a project meets any the above criteria, it must comply with Section 10910 *et seq.* of the Water Code. Section 10910 *et seq.* of the Water Code was also amended by SB 610 to require a city or county to coordinate the CEQA analysis with the water agency proposed to serve the project. Section 10910 *et seq.* requires a city or county to identify any public water system that may supply water to a Project. The city or county must ask each of these water providers to indicate whether its "total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the Project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses." If the city or county cannot receive this information from the water provider, it must provide the water supply assessment itself.

Senate Bill X7-7

Senate Bill X7-7 was enacted in November 2009, requiring all water suppliers to increase water use efficiency in two sectors, Urban Water Conservation and Agricultural Water Conservation. The urban water reduction goal is to reduce per capita urban water use by 20% by December 31, 2020, with an interim statewide goal of reducing per capita water use by at least 10% by December 31, 2015.

LOCAL

SCWA Zone 40 Water Supply Master Plan

SCWA was formed in 1952 by a special legislative act of the State of California making water available for any beneficial use of lands and inhabitants, and for producing, storing, transmitting, and distributing groundwater. Zone 40 was created by SCWA Resolution No. 663 in May 1985, which describes the exact boundaries of the zone, and defines the projects to be undertaken. SCWA Ordinance No. 18, adopted in 1986, empowered SCWA to establish fees, charges, credits, and regulations for the wholesale supply of water to zones within SCWA.

The Zone 40 Water Supply Master Plan (WSMP) was prepared by the SCWA to provide a flexible program of water management alternatives that can be implemented and revised, if necessary, as the availability and feasibility of water supply sources change in the future. The WSMP also reflects changes from the 1987 Zone 40 Water Supply Master Plan in the pattern of growth in water demands, water quality treatment requirements, expansion of the original service area, and in the availability of potential sources of surface water supplies.

The WSMP has two coequal objectives: (1) to provide a reliable and safe water supply for the region's economic health and planned development through the year 2030, and (2) to preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River. This plan describes the studies performed and presents findings, conclusions, and recommendations to meet future water demands in Zone 40 through the year 2030.

SCWA Zone 41 2010 Urban Water Management Plan

The Zone 41 UWMP addresses SCWA's water systems and includes a description of the water supply sources, magnitudes of historical and projected water use, and a comparison of water supply water demands during normal, single-dry, and multiple-dry years. The Zone 41 UWMP is

the year 2010 Plan as required by the Urban Water Management Planning Act (Act) (California Water Code Division 6, Part 2.6, Sections 10610 through 10657).

Elk Grove Water District Urban Water Management Plan

The Elk Grove Water District prepared an UWMP in 2011, as required by the Urban Water Management Planning Act of 1983. The focus of the EGWD UWMP is the conservation and efficient use of water in the Elk Grove service area, and the development and implementation of plans to assure reliable water service in the future. The EGWD UWMP contains projections for future water use through 2035, discusses the reliability of the City's water supply through 2035, describes the City's water treatment system, and contains a water shortage contingency plan. In addition, the EGWD UWMP contains best management practices for efficient water use.

City of Elk Grove General Plan

The General Plan contains the following policies and actions that are relevant to water supply for the Project:

Policy CAQ-1 Reduce the amount of water used by residential and non-residential uses by encouraging water conservation.

CAQ-1-Action 1 Implement the City's Water Conservation Ordinance.

CAQ-1-Action 2 Actively encourage water conservation by both agricultural and urban water users.

CAQ-1-Action 3 Work with urban and agricultural water purveyors to establish long range conservation plans which set specific conservation objectives and utilize, to the extent possible, a common planning horizon, plan framework and estimating/ forecasting procedures.

CAQ-1-Action 4 Promote the use of drought-tolerant vegetation to minimize water consumption by providing information to developers and designers.

Policy PF-1 Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

Policy PF-2 The City shall coordinate with outside service agencies including water and sewer providers, the Elk Grove Community Services District, and the Elk Grove Unified School District – during the review of plans and development projects.

Policy PF-3 Water supply and delivery systems shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City's satisfaction.

PF-3-Action 2 The following shall be required for all subdivisions to the extent permitted by state law:

- Proposed water supply and delivery systems shall be identified at the time of tentative map approval to the satisfaction of the City. The water agency providing service to the

project may provide several alternative methods of supply and/or delivery, provided that each is capable individually of providing water to the project.

- The agency providing water service to the subdivision shall demonstrate prior to the approval of the Final Map by the City that sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects in the same service area, and other projects that have received commitments for water service.
- Offsite and onsite water infrastructure sufficient to provide adequate water to the subdivision shall be in place prior to the approval of the Final Map or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.
- Offsite and onsite water distribution systems required to serve the subdivision shall be in place and contain water at sufficient quantity and pressure prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.

Policy PF-5 The City supports the use of reclaimed water for irrigation wherever feasible.

Policy PF-7 The City shall require that water flow and pressure be provided at sufficient levels to meet domestic, commercial, industrial, and firefighting needs.

Water Efficient Landscape Requirements, Chapter 14.10

The Water Use and Conservation Chapter 14.10 defines the standards and procedures for the design, installation, and management of landscapes in order to utilize available plant, water, land, and human resources to the greatest benefit of the people of Elk Grove. The Chapter applies to new and rehabilitated landscaping for industrial, commercial, and institutional developments; to parks and other public recreational areas; to multi-family residential, common areas and model homes; and City road medians and corridors, recognizing that skillful planting and irrigation design, appropriate use of plants, and intelligent landscape management can assure landscape development that avoids excessive water demands and that is less vulnerable to periods of severe drought.

THRESHOLDS OF SIGNIFICANCE- WATER SUPPLY

Consistent with Appendix G of the CEQA Guidelines, the Project may have a significant impact on the environment associated with Utilities if it would:

1. Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
2. Have insufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements are needed.

IMPACTS AND MITIGATION MEASURES

Impact 3.12-2: Implementation of the Project would not require construction or expansion of water treatment facilities or exceed the available water supply. (less than significant)

As discussed previously, implementation of the Project does not, in and of itself, construct new housing in the City. However, the Project does facilitate the development of residential units by providing policies and actions that would promote housing for all persons. The majority of policies and actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. As is shown in Tables 2.0-1 and 2.0-2 of Section 2.0 Project Description, implementation of the Housing Element would result in changing the General Plan land use designations and/or zoning of up to 42 sites in the City. The Project would change allowed land uses on up to 353.5 acres in order to accommodate up to 8,843 residential housing units. In comparison, using the existing General Plan land use designations for these 42 sites would allow for the development of 3,968 housing units (based on the maximum number of units per acre per land use designation). Implementation of the Housing Element would increase the number of dwelling units in the City by 4,875 over those identified in the General Plan. This increase of 4,875 housing units would result in a potential population increase of up to 15,680 persons when compared to the adopted General Plan (see Table 3.9-4).

The potential increase in development density and intensity on these 42 sites could result in impacts associated with water treatment and supply not discussed in previous General Plan environmental documents. Table 3.12-8 identifies the water demand that would be generated with full development of the 42 sites.

TABLE 3.12-8: HOUSING SITES WATER DEMAND POTENTIAL

POPULATION INCREASE	*POTENTIAL WATER DEMAND[1] GAL/DAY*	*POTENTIAL WATER DEMAND AF/DAY*	*POTENTIAL WATER DEMAND AFY*
15,680	3,559,360	10.9	3,987

Notes: 1) Using the 2015 EGWD 227 gallons per day per capita demand.

Based on a potential population increase of 15,680, development of the 42 sites would result in water demand of approximately 3,987 AFY[1]. As described above, all of the wholesale water supplies for the City are provided by SCWA Zone 40.

Table 7-1 in the SCWA 2010 Zone 41 UWMP identifies water supply totals and water demand totals for all areas inside of SCWA Zone 40, which is the water supply source for both SCWA Zone 41 and the EGWD. Between 2015 and 2035, SCWA water supplies are projected to continuously increase, and supply would exceed demand in 2015 by 13,575 AFY, and 31,788 AFY by 2035. The projected increase in water demand of 3,987 AFY as a result of full buildout of the 42 sites identified in the Housing Element would not exceed the projected water supply available within Zone 40 in any year through 2035.

[1] Based on an EGWD anticipated 2015 per capita daily use of 227 gallons.

In order to meet the projected increase in water demand that would result from the Project, the EGWD and SCWA Zone 41 may need to increase the amount of wholesale water purchased from SCWA Zone 40. The EGWD may also elect to increase groundwater pumping rates in order to offset the increase in demand generated by the Project. As described above, there are existing and planned water supply sources available from SCWA Zone 40 to meet all of the projected increase in water demand that would result from Project implementation and buildout of the 42 opportunity sites. The delivery of additional wholesale water to the EGWD and SCWA Zone 41 would not require the construction of new or additional water supply facilities, nor would it exceed the available supply of wholesale water available to the water providers in the City.

Any subsequent development described in the Housing Element would be subject to the Elk Grove General Plan policies and actions that assist in the provision of water treatment facilities and water supply. Policy CAQ-1 promotes the City's desire to reduce the amount of water used by residential and non-residential uses by encouraging water conservation. CAQ-1-Action 1 requires the implementation of the Water Use and Conservation Chapter 14.10. CAQ-1-Action 2 requires the City to actively encourage water conservation by both agricultural and urban water users. CAQ-1-Action 3 requires the City to work with urban and agricultural water purveyors to establish long range conservation plans. CAQ-1-Action 4 promotes the use of drought-tolerant vegetation to minimize water consumption by requiring the City to provide information to developers and designers. Policy PF-1 requires that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life. Policy PF-2 requires the City to coordinate with outside service agencies, including water providers, during the review of plans and development projects. Policy PF-5 identifies the City support in the use of reclaimed water for irrigation.

Additionally, Policy PF-3 requires that water supply and delivery systems are available to meet the demand created by new development. In support of this policy, PF-3-Action 2 requires the following for all subdivisions:

- Proposed water supply and delivery systems shall be identified at the time of tentative map approval to the satisfaction of the City. The water agency providing service to the project may provide several alternative methods of supply and/or delivery, provided that each is capable individually of providing water to the project.
- The agency providing water service to the subdivision shall demonstrate prior to the approval of the Final Map by the City that sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects in the same service area, and other projects that have received commitments for water service.
- Offsite and onsite water infrastructure sufficient to provide adequate water to the subdivision shall be in place prior to the approval of the Final Map or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.
- Offsite and onsite water distribution systems required to serve the subdivision shall be in place and contain water at sufficient quantity and pressure prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.

While the increase of 4,875 housing units over those currently identified in the General Plan would increase the demand for water and water treatment, the policies and actions in the Elk Grove General Plan, especially Policy PF-3 and PF-3 Action-2, are designed to remove impacts to water treatment and supply. The policies in the Elk Grove General Plan would assure that water treatment and infrastructure is not compromised by the development of new housing units to meet the Housing Element goals. Additionally, there are adequate supplies of water available from SCWA Zone 40 to meet projected water demands throughout the SCWA Zone 40 service area, in addition to the increase in water demand that would result from full buildout of the 42 opportunity sites identified in the Housing Element. Consequently, impacts to water supplies are considered **less than significant**.

3.12.3 STORMWATER SERVICES

EXISTING SETTING

The City's Department of Public Works provides stormwater planning and management activities in the City. The City adopted a comprehensive Storm Drainage Master Plan to provide a variety of drainage concepts for upgrading the existing storm drainage and flood control collection (SD&FCC) system. The Master Plan identifies and analyzes the existing drainage deficiencies throughout the City; provides a range of drainage concepts for the construction of future facilities required to serve the City at buildout of the General Plan; and establishes criteria for selecting and prioritizing projects. The Master Plan combines the demands of flood-risk reduction with ecosystem enhancements while incorporating urban development and rural residential land uses to provide an effective plan that will meet both the City's and community's vision.

Storm drainage within the City is conveyed through a SD&FCC system consisting of approximately 400 miles of underground pipes and 60 miles of natural and constructed channels (City of Elk Grove 2011, pg, 1-4). The SD&FCC system can be characterized as a gravity flow system for the portion of the City east of the Union Pacific Railroad tracks and a pumped system west of the tracks. The City has 20 detention basins that were primarily constructed in conjunction with commercial and residential development in order to mitigate project stormwater runoff flows (City of Elk Grove 2011, pg. 1-4).

The Storm Drainage Master Plan divides the City into four separate regions, as listed below. These four regions have unique and different land use characteristics; therefore, SD&FCC deficiencies and new development are evaluated and addressed differently:

- **Elk Grove Creek Region:** Southeast portion of the City, beginning just east of Grant Line Road and joining Laguna Creek just west of State Route 99;
- **Shed C Region:** Southernmost portion of the City, beginning on the west side of State Route 99 and continuing southwest outside the City limits to the Stone Lakes National Wildlife Refuge located west of Interstate 5;
- **East Elk Grove Area/Rural Region:** Bounded by Waterman Road on the west, Calvine Road on the north, and Grant Line Road/City boundary on the east; this area includes Grant Line Channel, Deer Creek, and Laguna Creek; and
- **Other Urbanized Areas:** Includes well-developed areas in the City that are builtout with residential, commercial or industrial land uses.

The City's stormwater runoff drains within 13 watersheds. Within the watersheds there are 10 natural creeks or open channels that convey stormwater runoff within the City including Elk Grove Creek, Laguna Creek, Strawberry Creek, Whitehouse Creek, Deer Creek, Shed A Channel, Shed B Channel, Shed C Channel, Grant Line Channel, and Laguna West Channel. Four of the creeks convey runoff that originates outside of the City limits: Deer Creek, Elk Grove Creek, Laguna Creek, and Strawberry Creek. All of the City watersheds ultimately drain into the Stone Lakes National Wildlife Refuge area of Sacramento County, with the exception of the Deer Creek and Grant Line Channel watersheds, which drain to Deer Creek and ultimately to the Cosumnes and Mokelumne Rivers (City of Elk Grove 2011, pg. 1-4).

REGULATORY SETTING – STORMWATER

National Pollutant Discharge Elimination System (NPDES)

NPDES permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the Environmental Protection Agency Regional Administrator. The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti- degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWC.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and are therefore to be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the RWQCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB issues general permits for stormwater runoff for construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Valley Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

In 2008, the cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Sacramento, and the County of Sacramento were reissued a National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit from the California Regional Water Quality Control Board, Central Valley Region to allow the lawful discharge of Sacramento area urban runoff into local creeks and rivers. The Storm Water Permit, a result of federal regulations driven by the Clean Water Act requires the permitees in the Sacramento Storm Water Quality Partnership to reduce pollutants in urban storm water discharges to the maximum extent practicable.

LOCAL

City of Elk Grove General Plan

The General Plan contains the following goals and policies that are relevant to stormwater service and facilities for the Housing Element:

Policy CAQ-18 Post-development peak storm water runoff discharge rates and velocities shall be designed to prevent or reduce downstream erosion, and to protect stream habitat.

Policy CAQ-19 Encourage the retention of natural stream corridors, and the creation of natural stream channels where improvements to drainage capacity are required.

CAQ-19-Action 2 The City shall permit stream channel realignment only:

- When necessary to eliminate flood hazards, after alternatives to provide flood capacity while protecting the natural alignment have been shown to be infeasible.

CAQ-19-Action 4 Where existing streams support riparian vegetation, evaluate options for constructing secondary flood control channels or other facilities for flood control and water quality purposes.

CAQ-19-Action 5 Channel lowering of existing natural streams shall occur only after consideration of alternatives (including surface drainage systems which do not require channel lowering) and only when it is necessary to accommodate the gravity drainage of storm runoff and/or accommodate flood flows under existing bridge structures.

CAQ-19-Action 6 All storm drainage improvements on natural streams shall be designed where feasible to maintain water flows necessary to protect and enhance existing fish habitat, native riparian vegetation, water quality, and/or ground water recharge.

Policy PF-1 Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

Policy PF-21 New development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law.

Policy PF-22 Infrastructure financing plans which specify the extent, timing and estimated cost of all necessary infrastructure shall be required for the approval of urban uses in the Laguna Ridge and Southeast Policy Areas, as defined in this General Plan. The resulting financing mechanisms shall be implemented prior to the development of urban uses.

City of Elk Grove Municipal Code

STORMWATER MANAGEMENT AND DISCHARGE CONTROL, CHAPTER 15.12

The intent of the Stormwater Management and Discharge Control Chapter (Elk Grove Municipal Code, Chapter 15.12) is to protect and enhance the water quality of watercourses, water bodies and wetlands within the City in a manner consistent with the federal CWA, the Porter-Cologne

Water Quality Control Act, and the NPDES permit by controlling the contribution of urban pollutants to stormwater runoff which enters the City's drainage conveyance system.

Chapter 15.12 of the City Municipal Code provides the City with the legal authority to accomplish the following goals:

- To reduce the discharge of pollutants in stormwater to the maximum extent practicable; To effectively prohibit non-stormwater discharges into the City drainage conveyance system;
- To comply with the requirements of the federal CWA, the Porter-Cologne Water Quality Control Act, and the NPDES permit as they apply to the discharge of pollutants into and from the City drainage conveyance system;
- To fully implement a comprehensive Stormwater Quality Management Program as approved by the RWQCB; To protect the physical integrity and function of the City drainage conveyance system from the effects of pollutants and materials other than stormwater;
- To prevent the contamination of groundwater as a result of pollution migration from the City drainage conveyance system;
- To promote cost-effective management and beneficial use of sediments in the City drainage conveyance system;
- To protect the health and safety of maintenance personnel and the public who may be exposed to pollutants in the City drainage conveyance system;
- To provide for the recovery of regulatory costs incurred by the City in the implementation of its Stormwater Quality Management Program, including, but not limited to, enforcement activities, inspections, investigations, sampling, and monitoring; and
- To establish appropriate enforcement procedures and penalties for violations.

Stormwater Quality Program County of Sacramento

The City is part of the Sacramento Stormwater Quality Partnership that covers the Sacramento County area — including the Cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova. The Sacramento County Stormwater Quality Program works to clean urban stormwater runoff and to protect our local creeks and rivers. The Monitoring and Target Pollutants (Mercury, Pesticides, etc) program elements of the stormwater quality program are accomplished jointly with the Partnership.

THRESHOLDS OF SIGNIFICANCE- STORMWATER SERVICES

Consistent with Appendix G of the CEQA Guidelines, the Project may have a significant impact on the environment associated with Utilities if it would:

1. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, or

2. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

IMPACTS AND MITIGATION MEASURES

Impact 3.12-3: Implementation of the Project would not require construction or expansion of stormwater facilities. (less than significant)

The Project does not, in and of itself, propose or construct new housing and as such, would not have a direct impact to stormwater facilities or service in the City. However, as an indirect result, implementation of the Project would facilitate the development of housing in the City on up to 42 sites, as described in Chapter 2.0.

This new housing may impact the City's stormwater facilities. The majority of the 42 opportunity sites identified in Section 2.0 are located in currently developed areas of the City and would connect to the existing stormwater drainage infrastructure. For those sites located in areas without existing stormwater drainage facilities, drainage facilities would be identified as a part of the project development process. If at that time, it is determined that the City has insufficient stormdrainage facilities to serve the project, General Plan Policy PF-21 requires new development to pay their fair share of infrastructure improvements. This would remove the burden from the City for providing financing for new wastewater services if new facilities are needed. Additionally, Policy PF-1 requires that treatment and infrastructure facilities be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life. This policy assures that new development cannot be constructed unless adequate storm drainage facilities are available.

Any new housing proposed following adoption of the Housing Element would be required to provide onsite drainage facilities and infrastructure, consistent with the requirements of Section 9 of the Elk Grove Department of Public Works Improvements Standards. As required by Section 9-6 of these Improvement Standards, all drainage must enter and leave the project area at its existing line and grade, unless otherwise approved by the Director. No net increase of peak flows is allowed and no net adverse impact for volume, quality, or duration is allowed. All impacts must be mitigated in the project area or lands acquired for mitigation by the project. These requirements would ensure that all future development projects provide adequate onsite drainage controls and facilities to ensure no increase in runoff volumes from the project site. As such, offsite drainage and stormwater infrastructure expansions would not be required as a direct result of implementation of the Housing Element.

The 2013 Housing Element Update would not require the construction of new stormwater facilities or expansion of facilities as it does not construct new housing. The policies in the Elk Grove General Plan and the various municipal code and improvement standards described above would assure that the City's existing stormwater drainage infrastructure would not need to be expanded due to a change in the existing drainage pattern from construction of new housing units developed to meet the 2013 Housing Element goals. Consequently, this impact is considered **less than significant**.

Impact 3.12-4: Implementation of the Project would not provide substantial additional sources of polluted runoff. (less than significant)

The City participates in the Sacramento County Stormwater Quality Program. The goal of the program is to prevent stormwater pollution, protect and enhance water quality in creeks and wetlands, preserve beneficial uses in waterways and comply with State and federal regulations. The Storm Water Permit, a result of federal regulations driven by the Clean Water Act requires the permitees in the Sacramento Storm Water Quality Partnership to reduce pollutants in urban storm water discharges to the maximum extent practicable. The City is committed to preserving and improving water quality in natural resources represented by creeks, channels, and streams throughout the City. In compliance with the State mandated National Pollution Discharge Elimination System (NPDES) Permit, the City manages the following ongoing activities:

- Compliance and reporting consistent with the Permit.
- Collaboration with the other permitees in the Sacramento Stormwater Quality Partnership (SSQP).
- Execution of multi-year permits and agreements for stream maintenance with various State and Federal agencies enforcing environmental compliance.
- NPDES inspections and construction compliance.

The Elk Grove General Plan includes policies and actions that are designed to protect the waterways and reduce flooding potential in the City. The City's NPDES Storm Water Permit prevents illicit discharges into drains, waterways and wetlands. Policy CAQ-18 regulates post-development peak storm water runoff discharge rates and velocities in order to prevent or reduce downstream erosion, and to protect stream habitat. Policy CAQ-19 states the City's policy on the retention of natural stream corridors, and the creation of natural stream channels where improvements to drainage capacity are required. CAQ-19-Action 2 requires the City only to permit stream channel realignment when necessary to eliminate flood hazards, after alternatives to provide flood capacity while protecting the natural alignment have been shown to be infeasible. CAQ-19-Action 4 requires that where existing streams support riparian vegetation, options must be evaluated for constructing secondary flood control channels or other facilities for flood control and water quality purposes. CAQ-19-Action 5 requires that channel lowering of existing natural streams shall occur only after consideration of alternatives (including surface drainage systems which do not require channel lowering) and only when it is necessary to accommodate the gravity drainage of storm runoff and/or accommodate flood flows under existing bridge structures. CAQ-19-Action 6 requires that all storm drainage improvements on natural streams shall be designed to maintain water flows necessary to protect and enhance existing fish habitat, native riparian vegetation, water quality, and/or ground water recharge.

Additionally, the City's Municipal Code Chapter 15.12 regulates stormwater management and discharge control in order to protect and enhance the water quality of watercourses, water bodies and wetlands within the City.

The Project, in and of itself, does not propose or construct new housing and as such, would not have a direct impact to stormwater pollution in the City. All new housing developed as an indirect result of implementation of the Housing Element would be required to comply with the policies in the General Plan, regulations of the City's NPDES permit and Chapter 15.12 of the Municipal Code. Therefore, the Project would not provide substantial additional sources of polluted runoff and is considered to have a **less than significant** impact.

3.12.4 SOLID WASTE

EXISTING SETTING

The City provides 41 waste reduction programs in order to meet its solid waste reduction goal. These programs are:

Composting
Residential Curbside Greenwaste
Collection Residential Self-haul Greenwaste
Commercial On-Site Greenwaste Pick-up
Commercial Self-Haul Greenwaste

Facility Recovery
MRF
Landfill
Transfer Station
Alternative Daily Cover

HHW
Permanent Facility
Curbside Collection
Waste Exchange
Education Programs

Policy Incentives
Economic Incentives
Ordinances

Public Education
Electronic (radio ,TV, web, hotlines)
Print (brochures, flyers, guides, news articles)
Outreach (tech assistance, presentations, awards, fairs, field trips)
Schools (education and curriculum)

Recycling
Residential Curbside
Residential Drop-Off
Residential Buy-Back
Commercial On-Site Pickup
Commercial Self-Haul
School Recycling Programs
Government Recycling Programs
Special Collection Seasonal (regular)
Special Collection Events
Other Recycling

Source Reduction
Xeriscaping/Grasscycling
Backyard and On-Site Composting/Mulching
Business Waste Reduction Program
Procurement
School Source Reduction Programs
Government Source Reduction Programs
Material Exchange, Thrift Shops

Special Waste Materials
White Goods
Scrap Metal
Wood Waste
Concrete/Asphalt/Rubble
Rendering

Transformation
Biomass

The City's annual per capita disposal rate has slightly decreased between 2010 and 2011, as shown in pounds per person per day, in Table 3.12-9 below.

TABLE 3.12-9: DISPOSAL RATE

REPORT YEAR	*ANNUAL PER CAPITA DISPOSAL RATE (PPD) PER RESIDENT*	*ANNUAL PER CAPITA DISPOSAL RATE (PPD) PER EMPLOYEE*
2007	4.1	20.2
2008	3.5	17.8
2009	2.6	14.1
2010	3.0	18.9
2011	2.9	17.2

Source: CalRecycle 2011

Solid waste services in Elk Grove are provided by Allied Waste Services. In addition to the weekly garbage service, Allied Waste provides green waste and recycling pickup. Recoverable items include: mixed paper, glass, aluminum cans, steel and tin cans, some plastics, corrugated cardboard, yard waste, and used motor oil.

Commercial waste service in the City, which includes waste generated by multi-family residential developments, is an "open market," meaning that commercial and multi-family waste is hauled by any permitted hauler selected by the development and is hauled to permitted landfills as chosen by the hauler.

Solid waste generated in Elk Grove is taken to various landfills. Table 3.12-10 shows landfills used for waste generated in Elk Grove and the permitted and remaining capacities of those landfills, as well as the total solid waste generated in Elk Grove in 2011. As shown, all of the landfills serving Elk Grove waste haulers have estimated closure dates beyond the year 2020. (CalRecycle 2013).

TABLE 3.12-10: DISPOSAL FACILITIES AND THEIR CAPACITIES

FACILITY	*ESTIMATED CEASE OPERATION DATE*	*TOTAL EST. PERMITTED CAPACITY (CUBIC YARDS)*	*TOTAL ESTIMATED CAPACITY USED*			*2011 ELK GROVE SOLID WASTE (TONS)*
			CUBIC YARDS USED	*CUBIC YARDS REMAINING*	*PERCENT REMAINING*	
Altamont Landfill & Resource Recovery (01-AA-0009)	1/1/2025	62,000,000	16,280,000	45,720,000 as of 8/22/2005	82.3%	22
Anderson Landfill (45-AA-0020	1/1/2055	16,840,000	49,259,75	11,914,025 as of 3/16/2008	29.2%	109
Azusa Land Reclaim. Landfill (19-AA-0013)	1/1/2025	66,670,000	32,570,000	34,100,000 as of 3/31/1996	48.9%	13
Foothill Sanitary Landfill (39-AA-0004)	12/31/2082	138,000,000	13,000,000	125,000,000 as of 6/10/2010	90.6%	4
Forward Landfill, Inc. (39-AA-0015)	1/1/2020	51,040,000	27,340,000	23,700,000 As of 5/19/2008	46.4%	61,123
L and D Landfill Co. (34-AA-0020)	1/1/2023	6,031,055	1,931,055	4,100,000 as of 5/31/2005	60.0%	5,109
North County Landfill (39-AA-0022)	12/31/2048	41,200,000	5,800,000	35,400,000 as of 12/31/2009	85.9%	1,152
Potrero Hills Landfill (48-AA-0075)	2/14/2048	83,100,000	69,228,000	13,872,000 as of 1/1/2006	16.7%	1,060
Sacramento County Landfill (Kiefer) (34-AA-0001)	1/1/2064	117,400,000	4,500,000	112,900,000 as of 09/12/2005	96.2%	9,522
Yolo County Central Landfill (57-AA-0001)	1/1/2081	49,035,200	-	-	-	327
Unknown Destination	-	-	-	-	-	4,280
					Total	**82,719**

SOURCE: CALRECYCLE WEBSITE 2013. HTTP://WWW.CALRECYCLE.CA.GOV/SWFACILITIES/DIRECTORY/SEARCH.ASPX AND HTTP://WWW.CALRECYCLE.CA.GOV/LGCENTRAL/REPORTS/DRS/DESTINATION/JURDSPFA.ASPX

City of Elk Grove Special Waste Collection Center

In early spring 2014, the City is anticipating the opening of a household hazardous waste facility that will be called the City of Elk Grove Special Waste Collection Center. This facility is being built to accept typical household hazardous waste generated by small businesses and residents in the region.

REGULATORY SETTING

STATE

California's Integrated Waste Management Act of 1989 (AB 939)

California's Integrated Waste Management Act of 1989 (AB 939) set a requirement for cities and counties to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling and composting. In order to achieve this goal, AB 939 requires that each City and County prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 939 also established requirements for cities and counties to develop and implement plans for the safe management of household hazardous wastes. In order to achieve this goal, AB 939 requires that each city and county prepare and submit a Household Hazardous Waste Element.

75 Percent Solid Waste Diversion

AB 341 requires CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the state to divert 75 percent of the solid waste generated in the state from disposal by January 1, 2020, requires businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012, and also streamlines various regulatory processes.

Construction and Demolition Waste Materials Diversion

Senate Bill 1374 (SB 1374), Construction and Demolition Waste Materials Diversion Requirements, requires that jurisdictions summarize their progress realized in diverting construction and demolition waste from the waste stream in their annual AB 939 reports. SB 1374 required the CIWMB to adopt a model construction and demolition ordinance for voluntary implementation by local jurisdictions.

California Green Building Standards Code (CALGreen)

CALGreen requires the diversion of at least 50 percent of the construction waste generated during most new construction projects (CALGreen Sections 4.408 and 5.408) and some additions and alterations to nonresidential building projects projects (CALGreen Section 5.713).

LOCAL

City of Elk Grove General Plan

The General Plan contains the following goals and policies that are relevant to solid waste disposal and recycling:

Policy CAQ-25: The City shall encourage:

- Recycling,
- Reduction in the amount of waste, and
- Re-use of materials to reduce the amount of solid waste generated in Elk Grove.

City of Elk Grove Municipal Code, Chapter 32.70

Chapter 30 of the City's Municipal Code regulates the management of garbage, recyclables, and other wastes. Chapter 30 sets forth solid waste collection, disposal, and diversion requirements for residential, commercial, industrial, and other uses and addresses yard waste, hazardous materials, recyclables, and other forms of solid waste. Chapter 32.70 establishes the diversion of construction and demolition debris, which requires projects necessitating a building permit, to submit a Waste Management Plan for the approval of the City's Building Safety and Inspection Division.

THRESHOLDS OF SIGNIFICANCE- SOLID WASTE

Consistent with Appendix G of the CEQA Guidelines, the Project will not have a significant impact on the environment associated with Utilities if it will:

1. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
2. Comply with federal, State, and local statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

Impact 3.12-5: The Project would be served by a landfill with adequate capacity and comply with all applicable solid waste regulations. (less than significant)

According to CalRecycle, the average solid waste generation rates per capita in the City was 2.9 pounds per day in 2011, which is the most recent data available (CalRecycle 2011).

Implementation of the Project is projected to result in an increase in population of 15,680 persons beyond the population growth assumed in the adopted General Plan, as previously described. Using the per capita generation rate of 2.9 pounds per day, the increased population would generate 45,472 lbs/day of solid waste, or 8,299 tons per year.

Any future development under the Project would be required to comply with applicable state and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. The City's solid waste generation has decreased since 2007 due to the waste diversion efforts of the City and it is anticipated that the City's efforts would continue to reduce the per capita and per employee diversion rates.

The General Plan Draft EIR anticipated urbanization of the City and identified that implementation of the General Plan would result in less than significant impacts to solid waste with implementation of mitigating General Plan Policy CAQ-18 and associated actions (Impact 4.12.5.1; City of Elk Grove, 2003b, pp. 4.12-52 to 4.12-53). The Project will implement construction solid

waste reduction measures consistent with Chapter 32.70 of the Elk Grove Municipal Code and is consistent with General Plan policies and actions related to solid waste including Policy CAQ-18.

As previously described, solid waste generated in the City is disposed of at a variety of different landfills in the area (see Table 3.12-10). None of these landfills are projected to close before the year 2020, many much later. These landfills have a combined remaining capacity of 402,606,025 cubic yards, which is more than adequate to accommodate the waste associated with the Project. This is a **less than significant** impact.

REFERENCES

CalRecycle 2013. Solid Waste Information System (SWIS). Available at: http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx and http://www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination/JurDspFa.aspx

CalRecycle 2011. *Jurisdiction Diversion/Disposal Rate Summary (2007 - Current). Available at:* http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx. Accessed 6/27/2013.

City of Elk Grove. 2011. *Storm Drainage Master Plan Volume I.* Elk Grove, California. December 2011.

Elk Grove Water District (EGWD) 2011. *2010 Urban Water Management Plan.* June 22, 2011.

Sacramento Area Sewer District (SASD) 2011a. *Sewer System Capacity Plan 2010 Update Executive Summary.* Sacramento, CA. November 2011.

Sacramento Area Sewer District (SASD) 2011b. *Sewer System Capacity Plan 2010 Update* Sacramento, CA. November 2011.

Sacramento Area Sewer District (SASD) 2013. Information provided on SASD Website. Accessed 2/25/2013. http://www.sacsewer.com/welcome.html

Sacramento County Water Agency (SCWA) 2005. *Zone 40 Water Supply Master Plan.* February 2005.

Sacramento County Water Agency (SCWA) 2011. *Zone 41 Urban Water Management Plan.* June 2011.

Sacramento Regional County Sanitation District (SRCSD) 2008. *2020 Master Plan, Final Executive Summary.* Mather, California. May, 2008

Sacramento Regional County Sanitation District (SRCSD) 2012. *2012 State of the District Report.* Mather, California.

Sacramento Regional County Sanitation District (SRCSD) 2013. *Sewer System Management Plan.* Mather, California. January 30, 2013.

http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx

CEQA requires an EIR to evaluate a project's effects in relationship to broader changes occurring, or that are foreseeable to occur, in the surrounding environment. Accordingly, this chapter presents a detailed discussion, consistent with the requirements of CEQA, of the cumulative impacts, growth-inducing impacts, and significant and irreversible effects of the Project, and growth inducement associated with the Project.

4.1 CUMULATIVE IMPACTS

This Draft EIR provides an analysis of overall cumulative impacts of the Project taken together with other past, present, and probable future projects producing related impacts, as required by Section 15130 of the California Environmental Quality Act Guidelines (State CEQA Guidelines). The goal of this analysis is two-fold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant; and second, to determine whether the Project itself would cause a "cumulatively considerable" incremental contribution to any such cumulatively significant impacts. (See State CEQA Guidelines Sections 15130[a],[b], Section 15355[b], Section 15064[h], Section 15065[c]; *Communities for a Better Environment v. California Resources Agency* [2002] 103 Ca1.App.4th 98, 120.) In other words, the required analysis intends to first create a broad context in which to assess the project's incremental contribution to anticipated cumulative impacts, viewed on a geographic scale well beyond the Project area itself, and then to determine whether the project's incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., "cumulatively considerable" in CEQA parlance).

Pursuant to Section 15130(b) of the State CEQA Guidelines, "(t)he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the Project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impacts to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact."

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. State CEQA Guidelines Section 15130 requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of a project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]).

The State CEQA Guidelines Section 15130(b)(1) provides two approaches to analyzing cumulative impacts. The first is the list approach, which requires a listing of past, present, and reasonably

anticipated future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency. The second is the plan approach, wherein the relevant projections contained in an adopted general plan or related planning document that is designed to evaluate regional or area-wide conditions contributing to the cumulative effect. For this Draft EIR, the plan approach has been used to analyze cumulative impacts.

CUMULATIVE DEVELOPMENT ASSUMPTIONS

The cumulative scenario for the Project is based on buildout of the City's General Plan. The General Plan serves as the blueprint for development in the city. It is a long-range planning document that describes the goals, policies and programs to guide decision-making. Once the General Plan is adopted, all development-related decisions must be consistent with the plan. If a development proposal is not consistent, it must be revised or the General Plan itself must be amended. The analysis of cumulative effects considered the General Plan growth under cumulative conditions, as described below.

Population

Between 1990 and 2000, the population of what would become the City increased by 71 percent, an average annual increase of seven percent. Elk Grove began to rapidly develop as a result of an increase in jobs in the Sacramento County region and the availability of land outside the downtown Sacramento area. Previous population projections from the Sacramento Area Council of Governments (SACOG) estimated growth through 2015 and had anticipated a gradual increase of four to six percent per year. However, SACOG's current projections show an increase in population at an average rate of 1.4 percent per year from 2010 (based on Department of Finance 2011 demographic report benchmarked to the 2010 Census) through 2035. Growth in recent years can be attributed to new construction (people moving to Elk Grove) and the annexation of the Laguna West-Lakeside Census Designated Place (adding 25,000 residents to the City). Based on the City's adopted General Plan land use designations, the City's population is anticipated to increase to approximately 197,640 persons by 2025. It is noted that the City's projection for growth exceeds SACOG's projection for the region, based on applying the growth rates in SACOG's projections to the City, as described in Section 3.9.

TABLE 4-1 POPULATION TRENDS

YEAR	POPULATION	CHANGE	AVERAGE ANNUAL % CHANGE
2000	72,665		--
2010	153,015	80,350	11.1%
2013	159,074	6,059	1.3%
2025[5]	197,640	38,566	2.0%

SOURCE:

[1] *City of Elk Grove, 2002. Census 2000 Data.*
[2] *State of California, Department of Finance. 2010. E-5 Population and Housing Estimates for Cities, Counties and the State, 2000-2010, with 2010 Benchmark. Sacramento, California.*
[3] *State of California, Department of Finance. 2011. E-5 Population and Housing Estimates for Cities, Counties and the State, 2010-2011, with 2010 Benchmark. Sacramento, California.*
[4] *City of Elk Grove, 2011.*
[5] *Projected*

Employment

The work force in the Sacramento metropolitan area encompasses professional, technical, production, transportation, and service occupations. The region's manufacturing sector has grown steadily since the late 1970s, spurred by the expansion of high-technology industries.

According to SACOG projections, the City had 11,147 jobs in 2000. The City anticipates job growth increase of 24,722 jobs between the years 2005 and 2025. As shown in Table 4-2, Elk Grove can expect a steady increase in job growth through 2025.

TABLE 4-2 CITY OF ELK GROVE JOBS PROJECTIONS

YEAR	*JOBS*	*PERCENTAGE CHANGE*
2000	11,147	--
2005	24,653	121.1%
2025	49,375	100.3%

SOURCE: SACOG, 2002; SACOG, 2008.; CITY OF ELK GROVE, 2011

CUMULATIVE EFFECTS OF THE PROJECT

Under CEQA, the discussion of cumulative impacts should focus on the severity of the impacts and the likelihood of their occurrence. The cumulative scenario for the Project includes growth planned for the City.

Impacts Addressed in the General Plan EIR

Section 15130(d) and (e) of the State CEQA Guidelines provides the following guidance regarding analysis of cumulative impacts that were addressed in a prior EIR:

"(d) Previously approved land use documents, including, but not limited to, general plans, specific plans, regional transportation plans, plans for the reduction of greenhouse gas emissions, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impacts analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or areawide cumulative impacts of the Project have already been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan."

"(e) If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impacts, as provided in Section 15183(j)."

Section 15168 of the State CEQA Guidelines provides the following guidance regarding the use of a Program EIR with subsequent environmental documents:

"(d) Use with Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The program EIR can:

(1) Provide the basis in an Initial Study for determining whether the later activity may have any significant effects.

(2) Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.

(3) Focus an EIR on a subsequent project to permit discussion solely of new effects which had not been considered before."

The City's General Plan was adopted by the City Council on November 19, 2003 and reflects amendments through July 2013. An Environmental Impact Report was prepared to analyze and disclose the environmental impacts associated with General Plan implementation. While the Project would result in more intense development than envisioned by the General Plan, the opportunity sites were all anticipated for future development in the General Plan. Therefore, the Project is consistent with the environmental analysis and conclusions of the General Plan EIR that are related to the location of development, such as potential for conversion of agricultural land to urban uses.

The General Plan EIR (City of Elk Grove, 2003d; SCH#: 2002062082) is hereby incorporated by reference, consistent with State CEQA Guidelines Section 15150, 15168(d)(2). The General Plan EIR is available for review at the City's Planning Department and on the City's website. The General Plan EIR evaluated the full range of environmental impacts anticipated with buildout of the General Plan land uses. The following is a summary of the cumulative impacts identified in the General Plan EIR that are relevant to subsequent development activities that may involve implementation of various measures associated with the Project. These subsequent development activities would be reviewed for compliance with the General Plan and would be required to comply with relevant mitigation measures adopted to mitigate cumulative impacts.

Impact 4.1.3 - Cumulative Impacts to Agricultural Resources. Implementation of the proposed General Plan along with potential development in the Urban Study Areas would contribute significantly to the conversion of important farmland and agriculture/urban interface conflicts. This would be a cumulative significant impact.

Impact 4.9.4 - Soil Erosion. Implementation of the proposed General Plan along with potential development of the Urban Study Areas could contribute to cumulative soil erosion impacts. This is considered a less than significant cumulative impact.

Impact 4.9.5 - Expansive Soils and Seismic Hazards. Implementation of the proposed General Plan along with potential development of the Urban Study Areas could result in cumulative impacts to expansive soils and seismic hazards. This is considered a less than significant cumulative impact.

Impact 4.10.4 - Cumulative Biological Resource Impacts. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would contribute

to cumulative impacts associated with significant effects to special-status plant and wildlife species and habitat loss. This would be a cumulative significant impact.

Impact 4.11.3 - Cumulative Impacts to Prehistoric and Historic Resources. Implementation of the proposed General Plan along with potential development in the Urban Study Areas could contribute to the disturbance of known and undiscovered prehistoric and historic resources in the Elk Grove area. This is considered a less than significant cumulative impact.

Impact 4.11.4 - Cumulative Impacts to Paleontological Resources. Implementation of the proposed General Plan along with potential development of the Urban Study Areas could contribute to the loss of paleontological resources in the Elk Grove area. This is considered a less than significant cumulative impact.

Project Cumulative Impacts

The Project's contribution to environmental impacts under cumulative conditions is based on implementation of the Housing Element and development of the opportunity sites identified in Chapter 2.0. See Chapter 2, Project Description, for a complete description of the Project.

Cumulative impacts for most issue areas are not quantifiable and are therefore discussed in general terms as they pertain to development patterns in the surrounding region. Exceptions to this are traffic, noise and air quality (the latter two of which are substantially associated with traffic volumes), which may be quantified by estimating future traffic patterns, pollutant emitters, etc. and determining the combined effects that may result. In consideration of the cumulative scenario described above, the Project may result in the following cumulative impacts.

AESTHETICS

Impact 4.1: Potential to contribute to the cumulative degradation of the existing visual character of the region (cumulatively considerable)

The cumulative setting for aesthetics is the City of Elk Grove Planning Area, as defined in the General Plan. Under cumulative conditions, buildout of the General Plan would result in changes to the visual character of the City's Planning Area and result in impacts to localized views as new development occurs within the City and the Planning Area.

As described in Section 3.1, Aesthetics, a main objective of the Housing Element is to encourage development of a variety of housing types and densities. Implementation the Housing Element and development of new housing in Elk Grove would for the most part be in or adjacent to currently urbanized neighborhoods and would occur on properties that have been designated in the General Plan and zoned for either residential or commercial development.

As described in Section 3.1, the City's General Plan, zoning, and design review requirements require future development to be compatible with the surrounding neighborhood and community. Application of the policies identified in Section 3.1, through the Design Review process to future development under the proposed Housing Element would provide compliance with community design goals and would serve to preserve Elk Grove's community character. The facilitation of in-

fill housing within the City limits reduces the pressure for development at the City's periphery, thus reducing conversion of surrounding open space and agricultural lands that are valued for their visual quality and their contribution to Elk Grove's visual character in the context of its setting. While implementation of the City's adopted ordinances and policies described in detail in Section 3.1 would ensure that subsequent multi-family development is compatible with adjacent development, the Project would result in an increase in building densities, mass, and intensity that would result in significant visual changes throughout the City associated with development of the opportunity sites, particularly those sites anticipated for lower intensities of development in the General Plan. Therefore, the Project would have a considerable contribution to the significant and unavoidable change of the visual character of the City that would occur with implementation of the General Plan, as amended by the Project.

AIR QUALITY

Impact 4.2: Potential to contribute to cumulative impacts on the region's air quality (cumulatively considerable)

The cumulative setting for air quality impacts is the SVAB, which is described in Section 3.2. Under buildout conditions in the Elk Grove General Plan, the SVAB would continue to experience increases in criteria pollutants and efforts to improve air quality throughout the basin would be hindered. As described in Section 3.2, Sacramento County has a state and federal designation of Nonattainment for Ozone, PM_{10}, and $PM_{2.5}$, and is either Unclassified or Attainment for all other criteria pollutants. Table 3.2-2 presents the state and national attainment status.

As discussed under Impacts 3.2-2 and 3.2-3, the Project would result in increased emissions primarily from vehicle miles travelled associated with Project implementation (development of the opportunity sites) as well as from Project construction activities. As described under Impact 3.2-2, even with implementation of mitigation measures to reduce potential air pollutant emissions the Project would exceed SMAQMD thresholds of significance. Under cumulative conditions, mobile source emissions generated by the Project would contribute to the region's air pollution and would exceed the thresholds adopted by SMAQMD. Therefore, the Project would have a cumulatively considerable contribution to significant and unavoidable impacts to regional air quality.

GREENHOUSE GASES AND CLIMATE CHANGE

Impact 3.4-1: The Project may generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. (cumulatively considerable and significant and unavoidable)

Section 3.4 of this Draft EIR addresses impacts associated with greenhouse gases and climate change, which are cumulative by their nature.

HAZARDS AND HAZARDOUS MATERIALS

Impact 4.5: The Project may contribute to cumulative impacts related to hazards and hazardous materials (less than cumulatively considerable)

The cumulative setting for hazards and hazardous materials impacts is the City of Elk Grove. As discussed in Section 3.5, Hazards and Hazardous Materials, implementation of the Project would not result in any significant impacts related to this environmental topic. Hazard-related impacts tend to be site-specific and project-specific. Implementation of the Project would not result in increased risks of hazards in the cumulative setting area, nor would it result in or contribute to any significant off-site or indirect impacts. This is considered to be a **less than cumulatively considerable** impact, and no mitigation is required.

HYDROLOGY AND WATER QUALITY

Impact 4.6: The Project may contribute to cumulative impacts related to peak stormwater runoff flows or the degradation of water quality (less than cumulatively considerable)

The cumulative setting area for hydrology and water quality includes the City's Planning Area and surrounding areas within Sacramento County that share the drainage watershed areas of the City. Development of future housing in the City would result in new impervious areas associated with roadways, driveways, parking lots, buildings, and landscape areas. Normal activities in these developed areas include the use of various automotive petroleum products (i.e. oil, grease, fuel), household hazardous materials, heavy metals, pesticides, herbicides, fertilizers, and sediment. Within urban areas, these pollutants are generally called nonpoint source pollutants. The pollutant levels vary based on factors such as time between storm events, volume of storm event, type of uses, and density of people.

The City of Elk Grove General Plan has a number of policies which assist in the protection of water quality during the construction and operation of a housing project, as described under Section 3.6. Additionally, all housing developed as a result of implementation of the Housing Element would be subject to the provisions of the Municipal Code regulating water quality, riparian protection, flooding potential, and downstream drainage effects (e.g., run-off, erosion). The policies in the General Plan, implementation of NPDES requirements, and implementation of the various municipal code sections described in greater detail in Section 3.6 would ensure that water quality is not compromised by the development of new housing units to meet the Housing Element goals. These site-specific drainage requirements would also ensure that stormwater generated on the project site would not exceed the capacity of the existing stormwater drainage infrastructure in the vicinity of the site, and would further ensure that project implementation would not result in on- or off-site flooding impacts. During the design review phase of any subsequent development project allowed under the Project, the project-specific plans would be reviewed by the City and other regulatory agencies (such as the Central Valley Regional Water Quality Control Board) to ensure that all applicable drainage, flood control, and water quality measures have been incorporated into the project design. The requirements of the General Plan and the applicable sections of the Municipal Code would assure that drainage, flooding, and water quality impacts would not result from implementation of the Housing Element and subsequent development of the opportunity sites. As such, this impact is **less than cumulatively considerable**.

LAND USE

Impact 4.7: The Project may contribute to cumulative impacts on communities and local land uses (less than cumulatively considerable)

The cumulative setting for land use and planning impacts includes the City's Planning Area. Cumulative land use and planning impacts, such as the potential for conflicts with adjacent land uses and consistency with adopted plans and regulations, are typically site- and project-specific. Subsequent projects allowed by the General Plan may result in site-specific land use conflicts; however, these effects are not anticipated to be cumulatively considerable.

As set forth by state law, the General Plan serves as the primary planning document for the City. Subordinate documents and plans are required to be consistent with the General Plan. The proposed Project would update the Housing Element of the General Plan, amend the General Plan land use map, and revise the Zoning Code, as described in Chapter 2.0. The Housing Element identifies the City's approach to accommodating its housing needs. The majority of the City's housing needs would be accommodated on sites currently designated for housing development; however, there is a shortfall of sites to accommodate the City's fair share RHNA of very low and low income housing as described in Chapter 2.0.

Section 3.7 of this EIR includes a detailed analysis of the Housing Element's consistency with all applicable land use policies and regulations. As described under Impact 3.7-1, the Project is consistent with all applicable land use planning documents and policies adopted to reduce or mitigate an environmental impact. Generally, land use impacts are site-specific and would not result in a cumulative impact. Incompatibility issues are generally addressed and mitigated on a project-by-project basis. The Project has been designed to be consistent with applicable aspects of the City's General Plan. The project's contribution to cumulative land use planning impacts is **less than cumulatively considerable,** and no mitigation is required.

NOISE

Impact 4.8: The Project may contribute to the cumulative exposure of existing and future noise- sensitive land uses or to increased noise resulting from cumulative development (less than cumulatively considerable)

The cumulative context for noise impacts associated with the Project consists of the existing and future noise sources that could affect the project or surrounding uses. Noise generated by construction would be temporary, and would not add to the permanent noise environment or be considered as part of the cumulative context. As described under Impact 3.8-2 and 3.8-3, the implementation of Mitigation Measures 3.8-1 and 3.8-2, and compliance with the City's noise standards for construction would ensure that construction-related noise impacts, including groundborne noise and vibration, are less than significant.

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to the Project and other projects within the area. Table 3.8-3 show cumulative traffic noise levels with and without the Project. Under cumulative conditions, there would not be significant increases in noise levels compared to the no project conditions. As shown in Tables 3.10-14 and 3.10-15, the Project would contribute no more than 0.1 dB Ldn to noise levels on roadways fronting residential uses along the study area roadways. These increases are less than the City's test of significance outlined of 5 dB and would not be cumulatively considerable.

The new residential development on the opportunity sites has the potential to be exposed to noise levels in excess of the City's adopted standards, as described under Impact 3.8-4. Implementation of Mitigation Measures 3.8-3 through 3.8-7 would ensure that new sensitive receptors on the opportunity sites would not be exposed to excessive noise. Therefore, the project would have a **less than cumulatively considerable** contribution to potentially significant cumulative noise impacts.

POPULATION AND HOUSING

Impact 4.9: The Project may contribute to cumulative impacts on population growth (less than cumulatively considerable)

The cumulative setting for population growth is the City. As described in Section 3.9, SACOG is the lead agency for developing the RHNA for the Sacramento region, which includes Sacramento County and the City. The Project would ensure that the City has adequate sites to accommodate the RHNA and also provides additional sites to ensure that over the long-term, beyond the 2013-2021 RHNA period, that the City continues to have adequate sites to accommodate a range of housing needs. While the Project would slightly exceed the overall regional growth rate used for the RHNP and the MTP/SCS as discussed under Impact 4.9-1, these documents do not address cumulative growth whereas the General Plan identifies planned land uses for full buildout of the City, which is anticipated to occur after the 2013-2021 RHNA planning period.

The Project has been developed to accommodate the growth projections in the RHNA and is consistent with long-term regional growth projections. Therefore, implementation of the Housing Element would assist the City in accommodating its fair-share of growth and housing needs under cumulative conditions. The Project would not induce population growth as future population growth. As a result, this is considered a **less than cumulatively considerable** impact.

PUBLIC SERVICES

Impact 4.10: The Project may contribute to cumulative impacts on public services (less than cumulatively considerable)

Implementation of the Project would contribute toward an increased demand for public services and facilities within the City. Public service and facility needs for the City have been evaluated in the General Plan EIR, and the goals and policies included in the General Plan ensure that adequate services will be available for build-out of the General Plan. The City's Capital Facilities Fee program is reviewed and updated regularly to ensure that future development projects pay their fair-share to ensure that the City has adequate public services. Future development projects on the opportunity sites would be required to pay all applicable development impact fees, and comply with all applicable General Plan policies in order to ensure that public services are available to serve existing and future development in the City. As described in detail in Section 3.10, impacts to public services and facilities as a result of the Project would be less-than-significant. Compliance with adopted General Plan policies and Municipal Code requirements as well as the payment of development impact fees would ensure that the Project's cumulative contribution to the City's public service and facility needs would be **less than cumulatively considerable**.

TRANSPORTATION AND CIRCULATION

Impact 4.11: The project may contribute to cumulative impacts on the transportation network (cumulatively considerable/significant and unavoidable)

The cumulative setting area for transportation and circulation impacts includes the transportation system in and around the City, as described in Section 3.11. Cumulative impacts associated with the Project and future development of the opportunity sites are addressed under Impact 3.11-1 in Section 3.11.

As described under Impact 3.11-1, the Project would result in increased traffic and associated changes in traffic volumes and levels of service. As shown in Table 3.11-4, there are eight local roadway segments where traffic will function unacceptably both with and without the Project under cumulative conditions. The Project would not result in a significant increase in delay on these segments. Further, General Plan Policy CI-14 recognizes that LOS D may not be achieved on some roadway segments. The cumulative impact to these segments is less than significant and the Project would have a less than cumulatively considerable contribution to the cumulative condition.

As discussed under Impact 3.11-1, SR-99 and I-5 experience bottleneck and congestion during peak hours. These facilities would operate unacceptably both with and without the Project under cumulative conditions. As discussed under Impact 3.11-1, the Project would have a significant impact on these facilities pursuant to Caltrans' standard that considers any additional traffic as a significant impact to a facility that is operating unacceptably and no mitigation is feasible. Under cumulative conditions, the Project's contribution to the significant and unavoidable impact is ***cumulatively considerable***.

UTILITIES

Impact 4.12: The project may contribute to cumulative impacts on utilities (less than cumulatively considerable)

The cumulative setting for utilities includes the service area of the water, wastewater, and other utility providers.

As described under Impact 3.12-1, the increase of wastewater conveyed to the WWTP as a result of the future development associated with the Project would not cause the treatment plant to exceed its permitted capacity of 181 mgd dry weather flow and 391 mgd peak wet weather flow, nor would it result in any water quality violations, as the WWTP would continue to operate within its permitted capacity. The Project would not impede the SRCSD's ability to comply with its 2010 discharge permit, as amended by the Central Valley Water Board in 2013. The policies in the General Plan would assure that wastewater treatment and infrastructure is not compromised by the implementation of the Housing Element. Consequently, impacts to water treatment facilities and RWQCB requirements are considered **less than cumulatively considerable.**

As described under Impact 3.12-2, while the Project does not propose any development, the additional water demand created by full development of the opportunity sites would not exceed the available water supply under near-term (existing) conditions or future (cumulative) conditions. In order to meet the projected increase in water demand that would result from the Project, the

EGWD and SCWA Zone 41 may need to increase the amount of wholesale water purchased from SCWA Zone. The EGWD may also elect to increase groundwater pumping rates in order to offset the increase in demand generated by the Project. As described under Impact 3.12-2, there are existing and planned water supply sources available from SCWA Zone 40 to meet all of the projected increase in water demand that would result from Project implementation and buildout of the 42 housing sites. Further, the General Plan identifies policies and actions to reduce water use through encouraging water conservation. As such, implementation of the Housing Element would result in **less than cumulatively considerable** impacts related to water supplies under existing and cumulative conditions.

As described under Impact 3.12-3 and 3.12-4, the Project would not result in significant impacts to stormwater facilities nor provide substantial sources of polluted runoff. The City's General Plan and Municipal Code requirements described in Section 3.12 require new development to be designed so that there is no increase in the peak flow of drainage runoff and that there is no adverse impact for stormwater quality, volume, or duration of runoff. The Project would not require the construction of new stormwater facilities or expansion of facilities as it does not construct new housing. New housing constructed as an indirect result of implementation of the Project would be connected to existing and planned storm drainage facilities and be required to develop onsite drainage infrastructure that connects to existing and planned drainage facilities within the City. New projects are also required to pay their fair share for the development of new stormwater drainage facilities. Therefore, the potential for impacts to existing stormwater facilities and services is **less than cumulatively considerable.**

As described under Impact 3.12-5, the addition of the volume of solid waste generated under the Project, which is approximately 9,253 tons per year, to the landfills serving the City would not exceed the landfills' remaining capacity nor result in any violations to applicable state or federal regulations related to solid waste disposal. This is a **less than cumulatively considerable** impact.

4.2 GROWTH-INDUCING AND SIGNIFICANT AND IRREVERSIBLE EFFECTS

INTRODUCTION

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

> *The way in which a Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.*

Based on the State CEQA Guidelines, growth inducement is any growth that exceeds planned growth of an area and results in new development that would not have taken place without implementation of the Project. A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established

substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand *(Napa Citizens for Honest Government v. Napa County Board of Supervisors* (Cal. App. 1st Dist., 2001)). Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply in an area where water service historically limited growth could be considered growth-inducing.

The State CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

Components of Growth

The timing, magnitude, and location of land development and population growth in a region are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since the general plan of a community defines the location, type, and intensity of growth, it is the primary means of regulating development and growth in California.

EFFECTS OF THE PROJECT

Growth Effects

POPULATION GROWTH

Growth under the General Plan was anticipated to result in approximately 63,340 housing units and 73,567 jobs. The General Plan accommodates growth projected by SACOG and is anticipated to provide improved jobs/housing balance conditions. The General Plan recognized that future urban development outside of the City limits may be appropriate to accommodate future growth and identified Urban Study Areas as possible annexation areas for the City to accommodate such growth. The Project would increase the number of dwelling units that could occur under buildout conditions and would accommodate a greater population than was envisioned for the General

Plan. The Project is intended to accommodate the City's fair-share of regional housing needs and does not propose nor entitle development. It is anticipated that population growth in the City will continue to be driven by market conditions and the General Plan land use designations for residential uses will be revisited with each subsequent RHNA allocation that is received from SACOG.

GROWTH EFFECTS ASSOCIATED WITH INFRASTRUCTURE IMPROVEMENTS

The General Plan could potentially indirectly induce growth through removal of an obstacle to additional growth and development, such as removing a constraint on a required public service. The City's infrastructure and public services are largely provided by other public and private service providers (e.g., Sacramento County Water Agency for water supply, Sacramento Regional County Sanitation District and County Sanitation District 1 for wastewater service, Sacramento Municipal Utility District for electrical service) that utilize master plans for guiding planned facility and service expansions that are subject to environmental review under CEQA. The General Plan does include proposed roadway improvements that have been designed to support the General Plan Land Use Policy Map and maintain the City's proposed level of service (LOS) standard of LOS "D" where feasible and appropriate. The General Plan does not include any provisions requiring the oversizing of infrastructure facilities to serve growth not anticipated in the General Plan Land Use Policy Map. The Project would provide infrastructure improvements onto sites anticipated for residential and urban development in the General Plan EIR. The Project does not include any specific infrastructure improvements and also does not include any oversized infrastructure or infrastructure extensions that would result in growth beyond that envisioned for the Project.

ENVIRONMENTAL EFFECTS OF GROWTH

The General Plan would induce further population and job growth in the City as well as potentially induce growth outside of the City (e.g., within the Urban Study Areas). Proposed roadway improvements would support such growth within the City. As a result, the General Plan is considered to be growth-inducing. The environmental effects of this growth within the City and in the Urban Study Areas is addressed in Sections 4.1 through 4.13 of the General Plan Draft EIR. The Project does not propose to locate growth in areas not anticipated for residential or urban development in the General Plan and General Plan Draft EIR. The environmental effects of the Project are discussed in Sections 3.1 through 4.0 of this Draft EIR.

Significant and Irreversible Environmental Effects

CEQA requires that EIRs prepared for the adoption of a plan, policy, or ordinance of a public agency must include a discussion of significant irreversible environmental changes as a result of project implementation. State CEQA Guidelines Section 15126.2(c) describes irreversible environmental changes as:

> *"Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit*

future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

The General Plan EIR identified that implementation of the General Plan would result in the conversion of undeveloped open space land areas to residential, commercial, industrial, office, public and recreational uses. Development of the General Plan area would constitute a long-term commitment to residential land uses. It is unlikely that circumstances would arise that would justify the return of the land to its original condition. Development of the City would irretrievably commit building materials and energy to the construction and maintenance of buildings and infrastructure proposed. Renewable, nonrenewable, and limited resources that would likely be consumed as part of the development of the proposed Project would include, but are not limited to: oil, gasoline, lumber, sand and gravel, asphalt, water, steel, and similar materials. In addition, development of the General Plan would result in the increase demand on public services and utilities (see General Plan EIR Section 4.8 *Hydrology/Water* Quality and 4.12 Public Facilities and Finance).

The Project would allow development of the 42 opportunity sites, resulting in a permanent commitment of 353.5 acres to urbanized uses, as described in the Project Description. Development of these uses would result in the irretrievable commitment of building materials and energy, similar to the effects envisioned for the General Plan.

4.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

State CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. As discussed in Chapters 3.1 through 3.12, the majority of potential environmental impacts associated with implementation of the Project would be less than significant or would be less than significant with mitigation. The four significant and unavoidable impacts identified for the Project are:

Impact 3.1-1: Potential to substantially degrade the existing visual character or quality of the site and its surroundings. This impact is discussed in Section 3.1.

Impact 3.2-2: Potential to violate an air quality standard or contribute *substantially* to an existing or projected air quality violation – Project Operations. This impact is discussed in Section 3.2.

Impact 3.4-1: The Project may generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. This impact is discussed in Section 3.4.

Impact 3.11-1: Potential to conflict with an applicable plan, ordinance, or policy establishing acceptable levels of service for the performance of the circulation system. This impact is discussed in Section 3.11.

This page left intentionally blank.

5.1 CEQA REQUIREMENTS

CEQA requires that an EIR analyze a reasonable range of feasible alternatives that meet most or all of the project objectives while reducing or avoiding one or more significant environmental effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6[f]). Where a potential alternative was examined but not chosen as one of the range of alternatives, the CEQA Guidelines require that the EIR briefly discuss the reasons the alternative was dismissed.

A Notice of Preparation was circulated to the public to solicit comments regarding the EIR, including recommendations for a reasonable range of alternatives to the Project. During the NOP public review process, no specific alternatives were suggested.

5.2 ALTERNATIVES CONSIDERED IN THIS EIR

FACTORS GUIDING SELECTION OF ALTERNATIVES

Section 15126.6(a) of the CEQA Guidelines states *"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."*

The alternatives to the Project selected for analysis in the EIR were developed to minimize significant environmental impacts while fulfilling the basic objectives of the Project. The majority of environmental impacts associated with the Project are less than significant or can be mitigated to a less than significant level with implementation of mitigation measures. The significant environmental impacts associated with the Project that would not be mitigated to less than significant relate to aesthetic effects associated with the Project's potential to degrade the existing visual character or quality of the Project sites, air pollutant emissions associated with increased vehicle trips, circulation system impacts associated with increased vehicle trips that would exceed the acceptable levels of service, irreversible effects of growth, and cumulative effects associated with aesthetics, air quality, greenhouse gases, and transportation. Significant impacts are summarized in Chapter 4 and described in greater detail in Chapters 3.1 through 3.12. The Project alternatives are focused on reducing significant and unavoidable impacts that would not be reduced to a less than significant level with mitigation.

As described in Chapter 2, Project Description, the following goals and objectives have been identified for the Project.

Housing Element Goals

- Housing Goal 1: Provide adequate sites to accommodate the City's share of regional housing needs through appropriate zoning and development standards.

- Housing Goal 2: Assist in the development and provision of adequate housing stock to meet the needs of extremely low-, very low-, low-, and moderate-income households and special needs groups.
- Housing Goal 3: Identify and, where appropriate, remove governmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and special needs groups.
- Housing Goal 4: Conserve and improve the condition of existing affordable housing stock.
- Housing Goal 5: Promote housing opportunities for all persons, regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.
- Housing Goal 6: Preserve assisted (subsidized) housing developments for lower-income households.

Housing Element Objectives

- Maintain and enhance existing housing and blend well-designed new housing into existing neighborhoods.
- Use land efficiently to meet housing needs, minimize environmental impacts and maximize opportunities to use alternative transportation modes such as transit, bicycling and walking.
- Provide housing for special needs populations that is coordinated with support services.
- Build local government institutional capacity and monitor accomplishments to respond to housing needs effectively.
- Provide adequate sites to accommodate the City's long-term housing needs, with a buffer of high-density sites provided to acknowledge that some of the high density sites may be developed with market rate housing or other non-affordable housing uses and to ensure flexibility in future land use planning decisions.
- Accommodate high density housing consistent with the requirements of the Government Code, including Section 65583.2(c)(3)(B)(iv).
- Adopt a housing element meeting the requirements for certification by the California Department of Housing and Community Development.

The purpose of the Project is to update the Housing Element as required by State law. Therefore, a basic objective of the Project is to update the Housing Element consistent with the requirements of state law and to accommodate the City's housing needs, as required by State law. Alternatives 2 and 3 would fulfill the Project objectives.

ALTERNATIVES TO THE HOUSING ELEMENT UPDATE

Four alternatives to the Housing Element Update were considered based on the analysis performed to identify the environmental effects of the Project. The alternatives analyzed in this EIR include the following:

- **Alternative 1 - No Project Alternative.** Under Alternative 1, the City would not adopt the Housing Element Update. The adopted 2009 Housing Element would continue to be implemented and no changes to the General Plan or Zoning Code would occur.

- **Alternative 2 – Reduced Sites Alternative.** Under Alternative 2, Sites 4 through 7, C-3 through C-11, C-15 through C-17, C-24, C-26, C-28 through C-30, and C-34 through C-40 would be removed from the Project. This alternative would result in 206.4 acres of opportunity sites with a capacity for 5,164 dwelling units. The remaining sites would be developed as described in Chapter 2.0, Project Description. This alternative was developed to primarily to reduce the aesthetic impacts associated with large areas of high density housing and to reduce vehicle trips and associated traffic, air quality, and greenhouse gas impacts.

- **Alternative 3 – Affordable Housing Overlay Alternative.** Under Alternative 3, an affordable housing overlay would be applied to the 42 alternative sites and high density residential development on these sites would be limited to the amount necessary to accommodate the City's RHNA. This alternative would limit high density residential development on the 42 opportunity sites to the amount necessary to accommodate the RHNA. For the Project, this amount is 2,954 high density residential dwelling units during the 2013-2021 planning period; the remaining 508 lower income units in the RHNA can be accommodated on existing Sites 1, 8, 9, 10, 11, and 12. Under this alternative, the opportunity sites can be developed under either the site's existing base General Plan and land use designations as shown in Table 2.0-1 or under the Affordable Housing Overlay designation, which would accommodate development of multi-family units at 20.1 to 30.0 units per acre. This alternative was developed to primarily to reduce vehicle trips and associated traffic, air quality, and greenhouse gas impacts, to reduce cumulative impacts of the Project, and to reduce significant and irreversible effects of growth.

Alternatives Considered and Rejected for Further Analysis

A reduced density alternative that would revise Program 9.B to allow 15 to 20 dwelling units per acre on the Affordable Housing Overlay sites was considered, but rejected, as it would not provide adequate density to accommodate very low and low income housing to comply with Government Code density requirements and meet the City's Regional Housing Needs Allocation. Thus, this alternative would not achieve the Project's objectives and was not considered further.

An alternative was considered that would reduce the number and capacity of the opportunity sites to only accommodate 2,954 dwelling units, which is the City's unaccommodated RHNA

allocation. However, this alternative was rejected as it would not fulfill the Project objective of providing a buffer of high-density sites provided to acknowledge that some of the high density sites may be developed with market rate housing or other non-affordable housing uses and to ensure flexibility in future land use planning decisions.

An alternative with alternate sites was considered, but rejected, as no alternative sites were identified that would avoid or substantially reduce the significant impacts associated with the Project. Alternatives 2 and 3 were selected for further analysis in lieu of an alternative with alternate sites.

5.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for significant and unavoidable environmental impacts discussed in this EIR. Following the analysis of each alternative, Table 5.0-3 summarizes the comparative effects of each alternative related to the environmental issue areas.

ALTERNATIVE 1: NO PROJECT

Under Alternative 1, the City would continue to implement the adopted 2009 Housing Element of the General Plan, and no changes would be made to address the requirements of State law. Since adoption of the 2009 Housing Element, the City has been issued a Regional Housing Needs Allocation by the SACOG and is required by State law to address its housing needs in an updated Housing Element. The Housing Element goals, policies, and programs as well as the Land Use Map and Zoning Code would not be updated to address the City's housing needs under this alternative. The 42 opportunity sites would retain their adopted General Plan and zoning designations as shown in Table 2.0-2.

Alternative 1 would result in the continuation of existing conditions and development levels. Detailed environmental analysis was not performed for this alternative because it fails to meet the purpose of the project, which is to comply with state Housing Element law. However, since this alternative would not accommodate the land use changes described in the Project Description, it would avoid the potential environmental impacts to aesthetics, air quality, biological resources, greenhouse gases and climate change, hazards and hazardous materials, hydrology and water quality, land use, noise, population and housing, public services, circulation, utilities, and cumulative effects that are associated with the Project as described in Sections 3.1 through 4.0 of this EIR.

ALTERNATIVE 2: REDUCED SITES ALTERNATIVE

Under Alternative 2, Sites 4 through 7, C-3 through C-11, C-15 through C-17, C-24, C-26, C-28 through C-30, and C-34 through C-40 would be removed from the Project. Site C-22 would be reduced to 8 acres and Site C-23 would be reduced to 12 acres. Sites 2, 3, 7A, C-1, C-2, C-12 through C-14, C-18 through C-21, C-25, C-27, C-31 through C-34, and C-41 would remain as proposed by the Project. See Table 5-1 for a list of Alternative 2 sites, acreages, and capacity.

This alternative would result in 206.4 acres of opportunity sites (a reduction of 147 acres in comparison to the Project) with a capacity for 5,164 dwelling units (a reduction of 3,679 dwelling units in comparison to the Project). This alternative was developed to primarily to reduce the aesthetic impacts associated with large areas of high density housing and to reduce vehicle trips and associated traffic, air quality, and greenhouse gas impacts.

TABLE 5-1: SITES PROPOSED FOR GENERAL PLAN LAND USE AND ZONING CHANGES

Map ID	Acreage	Location	Current Designations		Proposed Designations		Anticipated Dwelling Units[1]	Entitlement Status
			General Plan	Zoning	General Plan	Zoning		
2	12.4	East Franklin at SW corner of Quail Run Lane/Poppy Ridge Road and Bruceville Road	HDR	RD-20	HDR	RD-25	310	None
3	14	Laguna Ridge, SE corner of Poppy Ridge Road and Bruceville Road	HDR	RD-20	HDR	RD-25	350	None
7A	8.7[2]	East Stockton just south of Sheldon	C/O/MF	SC(MF)	HDR	RD-25	218	None
C-1	8.7	East Stockton Blvd just north of Sheldon Road	MDR	SPAC99	HDR	RD-25	217	None
C-2	6.5[3]	NW corner of Big Horn and Bruceville Road	RR	SPALCF	HDR	RD-25	163	None
C-12	60.0[4]	Southeast Policy Area[3]	SEPA	AG-20	HDR	RD-25	1,500	In process, consistent
C-13	3.9	Laguna West Town Center	HDR	RD-25	HDR	RD-25	98	None
C-14	3.9	Laguna West Town Center	HDR	RD-25	HDR	RD-25	98	None
C-18	9.5	Laguna Ridge, SW corner of Poppy Ridge and Big Horn	HDR	AG-20	HDR	RD-25	238	None
C-19	0.9		HDR	AG-20	HDR	RD-25	23	None
C-20	1.6		HDR	AG-20	HDR	RD-25	40	None
C-21	4.4	Elk Grove Florin Road just south of Calvine	LDR	AR-5	HDR	RD-25	110	Prior application withdrawn
C-22	8.0	Brown Road, south of Calvine Road near Elk Grove Florin Road	LDR	AR-5	HDR	RD-25	200	None
C-23	12.0	Sheldon Road at Vytina Drive	LDR	AR-5	HDR	RD-25	300	None

Map ID	Acreage	Location	Current Designations		Proposed Designations		Anticipated Dwelling Units[1]	Entitlement Status
			General Plan	Zoning	General Plan	Zoning		
C-25	3.4	Elk Grove Boulevard at Backer Ranch (next to Nugget)	LDR	AR-5	HDR	RD-25	85	Application in process, consistent
C-27	9.4	Maritime, just west of Harbor Point	LDR	AR-5	HDR	RD-25	235	None
C-31	3.0	Harbour Point at Maritime	C	TC	HDR	RD-25	75	None
C-32	3.2	Elk Grove Boulevard, just west of Carlton Plaza	LDR	AR-2	HDR	RD-25	80	None
C-33	9.8	East Stockton Boulevard at Bow Street	C	SC	HDR	RD-25	245	None
C-34	8.1	East Stockton Boulevard south of Bond Road, just north of Premier West Bank	HDR	RD-20	HDR	RD-25	204	None
C-41	15.0[5]	Sheldon/Bruceville/ Big Horn/Lewis Stein	RR	SPALCF	HDR	RD-25	375	None
Total		206.4 acres					5,164	

Notes:
[1] Anticipated dwelling units based on the conservative(upper) end (25 du/ac) of historical densities (average 24 du/ac
[2] 9.7 acre site. Only 8.7 acres buildable due to reservation of 1 acre for drainage.
[3] 18 acre site. Only 6.5 acres assumed to be buildable due to floodplain.
[4] It is anticipated that the Southeast Policy Area will be adopted after the Housing Element. Therefore, the Housing Element includes H-1 Action 2 requiring this multifamily acreage in the final plan for the Southeast Area.
[5] Total site is 150± acres. Up to 15 acres are identified for HDR in H-1 Policy and existing General Plan Policy LU-40.

Table 5-2 presents a comparison of projected housing units and employees for each Alternative 2 site under the adopted General Plan land use designations and proposed Alternative 2 land use designations. Under the adopted General Plan, the sites associated with Alternative 2 would accommodate 3,100 units, meaning Alternative 2 would increase development potential by 2,064 dwelling units compared to the adopted General Plan.

TABLE 5-2: CAPACITY COMPARISON: EXISTING GENERAL PLAN V. ALTERNATIVE 2

MAP ID	ACREAGE	EXISTING GENERAL PLAN CAPACITY		PROPOSED CAPACITY		DIFFERENCE	
		HOUSING UNITS	EMPLOYEES	HOUSING UNITS	EMPLOYEES	HOUSING UNITS	EMPLOYEES
2	12.4	248	0	310	0	62	0
3	14	280	0	350	0	70	0
7A	8.7	58	139	218	0	160	-139
C-1	8.7	130	0	217	0	87	0
C-2	6.5	3	0	163	0	160	0

MAP ID	ACREAGE	EXISTING GENERAL PLAN CAPACITY		PROPOSED CAPACITY		DIFFERENCE	
		HOUSING UNITS	EMPLOYEES	HOUSING UNITS	EMPLOYEES	HOUSING UNITS	EMPLOYEES
C-12	60.0	1,500	0	1500	0	0	0
C-13	3.9	98	0	98	0	0	0
C-14	3.9	98	0	98	0	0	0
C-18	9.5	190	0	238	0	48	0
C-19	0.9	18	0	23	0	5	0
C-20	1.6	32	0	40	0	8	0
C-21	4.4	1	0	110	0	109	0
C-22	8.0	3	0	200	0	197	0
C-23	12.0	4	0	300	0	296	0
C-25	3.4	68	0	85	0	17	0
C-27	9.4	0	382	235	0	235	-382
C-31	3	0	104	75	0	75	-104
C-32	3.2	2	0	80	0	78	0
C-33	9.8	196	0	245	0	49	0
C-34	8.1	163	0	204	0	41	0
C-41	15.0	8	0	375	0	367	0
Total		3,100	625	5,164	0	2,064	-625

Notes: 1) Existing General Plan land use capacity is based on the anticipated capacity of the adopted General Plan land use designation.

Alternative 2 would reduce the acreage potentially converted to high density residential uses and would decrease the total number of dwelling units that could be created. The building mass and intensity on the remaining opportunity sites and portions thereof would be consistent with the Project. The reduction in development associated with Alternative 2 would result in a reduction in building masses, densities, site disturbance, impervious surfaces, vehicle trips, air pollutant emissions, noise, and demand for public utilities and services in comparison to the Project as fewer dwelling units would be developed. The opportunity sites that were removed or reduced in size could be developed under the adopted General Plan designations, which allow for lower intensities of development in comparison to the Project.

Potential impacts associated with Alternative 2 in comparison to the Project for each significant and unavoidable impact associated with the Project are described below. Table 5.0-1 provides an overall comparison of Alternative 2 to the Project for each environmental issue area discussed in Sections 3.1 through 4.0.

Degrade the Existing Visual Character or Quality of the Project Sites

Alternative 2 was designed to remove sites in some areas where a large cluster of high density residential development would occur under the Project or to reduce the size of the site where an extremely large high density residential development would occur under the Project. Under Alternative 2, the extent of high density residential development would be reduced and the overall building masses, intensities, and concentrations associated with the Project would be reduced. This would result in a reduction in the potential to degrade the existing visual

character or quality of the opportunity sites in comparison to the Project. Potential visual impacts would be reduced by adherence to the City's Design Guidelines and through the design review process, as described under Impact 3.1-1. While Alternative 2 would reduce potential visual impacts in comparison to the Project, the potential to degrade the existing visual character or quality of the opportunity sites would remain significant and unavoidable.

Air Pollutant Emissions, including Greenhouse Gases

Alternative 2 would reduce dwelling units by 3,679 in comparison to the Project, a reduction of 42% in high density units. However, the sites or portions thereof that are excluded from Alternative 2 could be developed with other uses consistent with the adopted General Plan designation. This alternative would reduce new high density residential units by 42% and would reduce vehicle trips by approximately 42%, from 58,240 under the Project to 34,013 This reduction in vehicle trips would result in reduced air pollutant and greenhouse gases emissions. As described under Impact 3.2-2, the Project would result in air pollutant emissions in excess of the adopted SMAQMD thresholds of significance for ROG and NOx. Alternative 2 would also result in air pollutant emissions in excess of the SMAQMD thresholds. However, the reduction in trips associated with Alternative 2 and associated reduction in mobile source air pollutant emissions and the reduction in dwelling units and associated reduction in area and energy source emissions would reduce the air pollutant emissions, including greenhouse gases, in comparison to the Project. As a result, this alternative is better than the Project in regards to air quality and greenhouse gases.

Circulation System Impacts Associated with Increased Vehicle Trips that would exceed the Acceptable Levels of Service

While Alternative 2 would reduce dwelling units by 3,679 in comparison to the Project, a reduction of 23% in high density units, the sites or portions thereof that are excluded from Alternative 2 could be developed with other uses consistent with the adopted General Plan designation. Therefore, while this alternative would reduce new high density residential units by 42%, the net reduction in trips is anticipated to be approximately 27%. As described under Impact 3.11-1, 4 local area roadway segments, SR-99, and I-5 would experience unacceptable levels of service both with and without the Project and the impact associated with the freeway segments is significant and unavoidable. These facilities would also experience unacceptable levels of service under Alternative 2. However, the reduction in trips associated with Alternative 2 would result in a reduction in vehicles on the impacted roadways, resulting in better conditions in comparison to the Project.

Cumulatively Considerable Effects

Alternative 2 would result in a reduction of 3,679 dwelling units and decrease in total population of 11,835 persons in comparison to the Project. Alternative 2 would also result in reduced air pollutant emissions, including greenhouse gases, and vehicle trips in comparison to the Project. The Project would result in a cumulatively considerable contribution to significant environmental impacts associated with aesthetics, air quality, greenhouse gases/climate

change, and transportation, as described in Chapter 4.0. Alternative 2 would also result in significant impacts associated with aesthetics, air quality, and transportation and would not avoid the cumulatively considerable contribution to significant environmental impacts, as described in Chapter 4.0. However, Alternative 2 would reduce the Project's contribution to these cumulative impacts and is, therefore, better than the Project in regards to cumulatively considerable effects.

ALTERNATIVE 3: AFFORDABLE HOUSING OVERLAY ALTERNATIVE

Under Alternative 3, an affordable housing overlay would be applied to the 42 alternative sites and high density residential development on these sites would be limited to the amount necessary to accommodate the City's RHNA. This alternative would allow high density residential development on the 42 opportunity sites to the amount necessary to accommodate the RHNA. For the Project, this amount is 2,954 high density residential dwelling units during the 2013-2021 planning period; the remaining 508 lower income units in the RHNA can be accommodated on existing Sites 1, 8, 9, 10, 11, and 12. Under this alternative, the opportunity sites can be developed under either the site's existing base General Plan and land use designations as shown in Table 2.0-1 or under the Affordable Housing Overlay designation, which would accommodate development of multi-family units at 20.1 to 30.0 units per acre. Depending on which of the opportunity sites are developed with affordable housing, this alternative will yield approximately 775 (if sites with existing higher density designations are developed) to 2,938 (if sites with non-residential or lower density designations are developed) more high density residential dwelling units than allowed under the adopted General Plan designations. This is a significant reduction in comparison to the Project, which would accommodate 4,875 more units than allowed by adopted General Plan designations. While Alternative 3 has the potential to reduce development in comparison to Alternative 2, which would accommodate 2,739 more units than allowed by adopted General Plan designations, this alternative could also result in slightly more high density residential units than Alternative 2.. Alternative 3 was developed to primarily to reduce vehicle trips and associated traffic, air quality, and greenhouse gas impacts and to reduce cumulative impacts of the Project.

Alternative 3 would reduce the acreage potentially converted to high density residential uses and would decrease the total number of dwelling units that could be created in comparison to the Project. Affordable high density housing would be limited to the amount of development necessary to accommodate the RHNA; development on the remaining opportunity sites could occur consistent with adopted General Plan designations which are generally less intense than those proposed by the Project. The reduction in development associated with Alternative 3 would result in a reduction in building masses, densities, site disturbance, impervious surfaces, vehicle trips, air pollutant emissions, noise, and demand for public utilities and services in comparison to the Project as fewer dwelling units would be developed.

Potential impacts associated with Alternative 3 in comparison to the Project for each significant and unavoidable impact associated with the Project are described below. Table 5.0-1 provides

an overall comparison of Alternative 3 to the Project for each environmental issue area discussed in Sections 3.1 through 4.0.

Degrade the Existing Visual Character or Quality of the Project Sites

Under Alternative 3, the extent of high density residential development would be reduced and the overall building masses, intensities, and concentrations associated with the Project would be reduced. This would result in a reduction in the potential to degrade the existing visual character or quality of the opportunity sites in comparison to the Project. Potential visual impacts would be reduced by adherence to the City's Design Guidelines and through the design review process, as described under Impact 3.1-1. While Alternative 3 would reduce potential visual impacts in comparison to the Project, the potential to degrade the existing visual character or quality of the opportunity sites would remain significant and unavoidable. It is noted that the benefits of Alternative 2, which was designed to reduce clusters of high density residential housing in order to reduce the visual effect of building massing and intensities may or may not occur under Alternative 3, as any combination of approximately 12 to 17 of the opportunity sites could be developed to accommodate the RHNA and those sites may be concentrated in proximity to one another.

Air Pollutant Emissions, including Greenhouse Gases

Depending on which of the opportunity sites are developed with affordable housing, this alternative will yield approximately 775 to 2,938 more high density residential dwelling units than allowed under the adopted General Plan designations. This is a significant reduction in comparison to the Project, which would accommodate 5,435 more units than allowed by adopted General Plan designations. This reduction in dwelling units would result in reduced air pollutant emissions, including greenhouse gases, associated with area and energy sources. Alternative 3's reduction in dwelling units by approximately 31 to 56% would result in a reduction in vehicle trips of approximately 20 to 37%, depending on which opportunity sites are developed, in comparison to the Project. This reduction in vehicle trips would result in reduced mobile source air pollutant emissions, including greenhouse gases. As described under Impact 3.2-2, the Project would result in air pollutant emissions in excess of the adopted SMAQMD thresholds of significance for ROG and NOx. Alternative 3 would also result in air pollutant emissions in excess of the SMAQMD thresholds. However, the reduction in trips associated with Alternative 3 and associated reduction in mobile source air pollutant emissions and the reduction in dwelling units and associated reduction in area and energy source emissions would reduce the air pollutant emissions in comparison to the Project. Since Alternative 3 could result in an increase in development compared to Alternative 2, this alternative could result in slightly worse air pollutant emissions. As a result, this alternative is better than the Project but worse than Alternative 2 in regards to air quality and greenhouse gases.

Circulation System Impacts Associated with Increased Vehicle Trips that would exceed the Acceptable Levels of Service

While Alternative 2 would reduce dwelling units by 20 to 37% in comparison to the Project, the sites or portions thereof that are not developed under the Affordable Housing Overlay from Alternative 3 could be developed with other uses consistent with the adopted General Plan designation. Therefore, while this alternative would reduce new high density residential units by 31 to 56%, the net reduction in trips is anticipated to be approximately 20 to 37%. As described under Impact 3.11-1, 4 local area roadway segments and eight freeway segments would experience unacceptable levels of service both with and without the Project and the impact associated with the freeway segments is significant and unavoidable. These segments would also experience unacceptable levels of service both with and without Alternative 3. However, the reduction in trips associated with Alternative 3 would result in a reduction in vehicles on the impacted roadways, resulting in better conditions in comparison to the Project. This alternative could result in an increase in vehicle trips compared to Alternative 2, so it is considered slightly worse than Alternative 2.

Cumulatively Considerable Effects

As previously described, Alternative 3 would result in a reduction in dwelling units in comparison to the Project. Alternative 3 would also result in reduced air pollutant emissions, including greenhouse gases, and vehicle trips in comparison to the Project. The Project would result in a cumulatively considerable contribution to significant environmental impacts associated with aesthetics, air quality, greenhouse gases/climate change, and transportation, as described in Chapter 4.0. Alternative 3 would also result in significant impacts associated with aesthetics, air quality, and transportation and would not avoid the cumulatively considerable contribution to significant environmental impacts, as described in Chapter 4.0. However, Alternative 3 would reduce the Project's contribution to these cumulative impacts and is, therefore, better than the Project in regards to cumulatively considerable effects. Since Alternative 3 has the potential to yield more high density residential units in comparison to Alternative 2, this alternative would potentially result in a higher population, an increase in development footprint, increased vehicle trips, increased air pollutant emissions and noise, and increased noise impacts in comparison to Alternative 2 and is, therefore, considered slightly worse than Alternative 2 under cumulative conditions.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The alternatives have been reviewed to determine which alternatives, if any, would be better than the Project. Alternative 1 is the environmentally superior alternative, as it would avoid potential environmental impacts associated with the Project. CEQA requires that when the environmentally superior alternative is the No Project Alternative, that an EIR identify the environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). Alternative 2 is the environmentally superior alternative because it better than the Project and is superior to Alternative 3. Table 5-3 summarizes the comparison of the alternatives to the Project for each environmental issue area.

TABLE 5-3: COMPARISON OF ALTERNATIVES TO THE PROJECT

ENVIRONMENTAL ISSUE	*ALTERNATIVE 1 NO PROJECT*	*ALTERNATIVE 2 REDUCED SITES ALTERNATIVE*	*ALTERNATIVE 3 – AFFORDABLE HOUSING OVERLAY ALTERNATIVE*
AESTHETICS	Avoided in comparison to the Project	Reduced in comparison to the Project and better than Alternative 3	Reduced in comparison to the Project and potentially worse than Alternative 2
AIR QUALITY	Avoided in comparison to the Project	Reduced in comparison to the Project and better than Alternative 3	Reduced in comparison to the Project and potentially worse than Alternative 2
BIOLOGICAL RESOURCES	Avoided in comparison to the Project	Reduced in comparison to the Project and better than Alternative 3	Reduced in comparison to the Project and potentially worse than Alternative 2
GREENHOUSE GASES AND CLIMATE CHANGE	Avoided in comparison to the Project	Reduced in comparison to the Project and better than Alternative 3	Reduced in comparison to the Project and potentially worse than Alternative 2
HAZARDS AND HAZARDOUS MATERIALS	Avoided in comparison to the Project	Reduced in comparison to the Project and better than Alternative 3	Reduced in comparison to the Project and potentially worse than Alternative 2
HYDROLOGY AND WATER QUALITY	Avoided in comparison to the Project	Reduced in comparison to the Project and better than Alternative 3	Reduced in comparison to the Project and potentially worse than Alternative 2
NOISE	Avoided in comparison to the Project	Reduced in comparison to the Project and better than Alternative 3	Reduced in comparison to the Project and potentially worse than Alternative 2
PUBLIC SERVICES	Avoided in comparison to the Project	Reduced in comparison to the Project and better than Alternative 3	Reduced in comparison to the Project and potentially worse than Alternative 2
TRANSPORTATION AND CIRCULATION	Avoided in comparison to the Project	Reduced in comparison to the Project and better than Alternative 3	Reduced in comparison to the Project and potentially worse than Alternative 2
UTILITIES	Avoided in comparison to the Project	Reduced in comparison to the Project and better than Alternative 3	Reduced in comparison to the Project and potentially worse than Alternative 2
Overall	**Best in comparison to the Project in terms of overall environmental effects**	**Better than the Project and Alternative 3 terms of overall environmental effects**	**Better than the Project in terms of overall environmental effects and potentially worse than Alternative 2**

CITY OF ELK GROVE

Taro Echiburú, AICP ..... Planning Director

Christopher Jordan, AICP ..... Planning Manager

DE NOVO PLANNING GROUP

Beth Thompson ..... Principal Planner/Project Manager

Steve McMurtry ..... Principal Planner

Ben Ritchie ..... Principal Planner

Fehr & Peers (Transportation and Circulation)

David Robinson, PE ..... Senior Associate

j.c. brennan & associates (Noise)

Luke Saxelby ..... Senior Consultant

This page left intentionally blank.

APPENDIX A

Notice of Preparation and

Comment Letters Regarding the Notice of Preparation

8401 LAGUNA PALMS WAY • ELK GROVE, CALIFORNIA 95758
TEL: 916.683.7111 • FAX: 916.691.2001 • www.elkgrovecity.org

DEVELOPMENT SERVICES

BUILDING SAFETY & INSPECTION	(916) 478-2235
COMMUNITY ENHANCEMENT	(916) 478-2266
ECONOMIC DEVELOPMENT	(916) 478-2261
PLANNING	(916) 478-2265
PUBLIC WORKS	(916) 478-2263

NOTICE OF PREPARATION

DATE: **August 2, 2013**

TO: **Office of Planning and Research, Responsible and Trustee Agencies**

LEAD AGENCY: **City of Elk Grove**
Contact: Taro Echiburú
8401 Laguna Palms Way
Elk Grove, CA 95758

SUBJECT: **Environmental Impact Report for the Housing Element Update**

In discharging its duties under Section 15021 of the California Environmental Quality Act (CEQA) Guidelines, the City of Elk Grove (as Lead Agency, hereinafter City) intends to prepare an Environmental Impact Report (EIR) for the 2013 Housing Element Update (the Project). In accordance with Section 15082 of the CEQA Guidelines, the City of Elk Grove has prepared this Notice of Preparation (NOP) to provide the Office of Planning and Research, Responsible and Trustee Agencies, and other interested parties with sufficient information describing the Project and its potential environmental effects.

The determination to prepare an EIR was made by the City following preliminary review of the Project. Probable environmental effects of the Project are described below.

As specified by the CEQA Guidelines, the NOP will be circulated for a 30-day review period. **The comment period runs from Friday, August 2, 2013 to Monday, September 2, 2013.** The City welcomes agency and public input regarding the scope and content of the EIR during this review period. Accordingly, interested persons, organizations, and agencies are encouraged to provide comments relevant to potential impacts, suggested mitigation measures, and project alternatives that should be considered in the EIR for the Project. In the event that no response or a well-justified request for additional time is received from any Responsible Agency by the end of the review period, the City may presume that the Responsible Agency has no response (CEQA Guidelines Section 15082(b)(2)).

Comments may be submitted in person at the Scoping Meeting, or in writing during the review period and addressed to:

City of Elk Grove
Planning Department
c/o Sarah Bontrager, Housing Program Manager
8401 Laguna Palms Way
Elk Grove, CA 95758

A Scoping Meeting will be held on August 15, 2013 at 10 A.M. in the City of Elk Grove Council Chambers, located at 8400 Laguna Palms Way, Elk Grove, CA.

PROJECT SUMMARY

The proposed project consists of the adoption and implementation of the 2013 Housing Element Update (the Project). The Project has been prepared to ensure the City's ability to accommodate housing needs, including Elk Grove's fair-share of the 2013-2021 Regional Housing Needs Allocation (RHNA). In accordance with State law, the Housing Element contains a housing plan that establishes goals, policies, and actions to address the City's housing needs. These policies and actions ensure adequate sites to accommodate housing needs, as well as provide incentives for production of affordable and special-needs housing and reduce barriers to the production of housing.

A. PROJECT GOALS

The purpose of the Project is to update the City's Housing Element to address the housing needs and objectives of the City and to meet the requirements of State law. The goals of the Housing Element are:

Housing Goal 1: Provide adequate sites to accommodate the City's share of regional housing needs through appropriate zoning and development standards.

Housing Goal 2: Assist in the development and provision of adequate housing stock to meet the needs of extremely low-, very low-, low-, and moderate-income households and special needs groups.

Housing Goal 3: Identify and, where appropriate, remove governmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and special needs groups.

Housing Goal 4: Conserve and improve the condition of existing affordable housing stock.

Housing Goal 5: Promote housing opportunities for all persons, regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.

Housing Goal 6: Preserve assisted (subsidized) housing developments for lower-income households.

B. PROJECT LOCATION AND SETTING

The Housing Element applies to housing development in the City of Elk Grove (see Figure 1). The Housing Element identifies land use changes to 42 sites to accommodate housing growth (see Figure 2), as described below under Housing Sites.

The City of Elk Grove encompasses approximately 93,560 acres within Sacramento County. The City of Elk Grove is located within the USGS 7.5 minute Bruceville, Buffalo Creek, Carmichael, Clarksburg, Courtland, Elk Grove, Florin, Galt, and Sloughhouse quadrangles. Elevations within the City of Elk Grove range from sea level to approximately 150 feet above mean sea level (MSL). Plant communities within the City of Elk Grove include agricultural cropland, annual grassland, fallow agricultural land, horticultural/landscape, irrigation ditches, irrigated pastures, open waters, perennial and seasonal marshes, riparian woodlands, seasonal wetlands, and vernal pools. Land uses throughout the City of Elk Grove vary, including urban, rural, and open space uses. Urban land uses in the City generally consist of residential, commercial, office, recreational, and public uses.

Natural features in the area include the Stone Lakes National Wildlife Refuge, the Cosumnes River, the Sacramento River and associated tributaries (e.g., Elk Grove Creek, Deer Creek,

Laguna Creek, Morrison Creek, and Whitehouse Creek), and vegetation communities consisting of valley oak woodland, annual grassland, valley foothill riparian, and agricultural lands.

C. PROJECT CHARACTERISTICS

The Housing Element includes the following components, consistent with the requirement of Government Code Section 65583:

- A review of the previous element's goals, policies, programs, and objectives to ascertain the effectiveness of each of these components, as well as the overall effectiveness of the Housing Element.
- An assessment of housing needs and an inventory of resources and constraints related to the meeting of these needs, including an inventory of sites available to accommodate the RHNA.
- An analysis and program for preserving assisted housing developments.
- A statement of community goals, quantified objectives, and policies relative to the preservation, improvement, and development of housing.
- A program which sets forth a schedule of actions that the City is undertaking or intends to undertake, in implementing the policies set forth in the Housing Element to identify adequate sites to accommodate the housing needs of all economic segments of the community. The program must do all of the following:
    - Identify actions that will be taken to make adequate sites available to accommodate the City's share of the regional housing need, if the need could not be accommodated by the existing inventory of residential sites;
    - Assist in the development of adequate housing to meet the needs of extremely low, very low, low, and moderate income households;
    - Address and, where appropriate, remove governmental constraints to the maintenance, improvement, and development of housing;
    - Conserve and improve the condition of the existing affordable housing stock;
    - Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability; and
    - Preserve assisted housing developments for lower income households.
    - Identify the agencies and officials responsible for implementation of the actions and the means by which consistency will be achieved with other General Plan elements and community goals.
    - Include a diligent effort to achieve public participation of all economic segments of the community.

The Housing Element Update focuses on revisions to the adopted Housing Element that are necessary to comply with changes to State law and that are needed to reflect changes that have occurred since adoption of the current Housing Element in 2008. These changes include updated demographic information, updated housing needs data, updated analysis of the availability of housing sites to meet the City's needs, and an updated Housing Program to establish goals, policies, and actions to address the City's housing needs. The Housing Element map of available housing sites will be updated to identify adequate sites to accommodate the

City's 2013-2021 RHNA, as described below, and the City will concurrently amend the General Plan Land Use Map and Zoning Map to accommodate the housing sites.

Housing Sites

Housing Element law requires the City to identify adequate sites to meet its fair-share of the RHNA. The RHNA is determined by the Sacramento Area Council of Governments (SACOG) for each city and county within its jurisdiction, based on the total regional housing need provided to SACOG by the State Department of Housing and Community Development (HCD). The City's RHNA for the 2013-2021 planning period is 7,402 units, allocated to specific income groups as shown in Table 1.

TABLE 1: CITY OF ELK GROVE – REGIONAL HOUSING NEEDS ALLOCATION

	Very Low	Low	Moderate	Above Moderate	TOTAL
RHNA	2,035	1,427	1,377	2,563	7,402

Source: Sacramento Area Council of Governments Regional Housing Needs Plan 2013-2021, Table 1

The City has a shortfall of sites to accommodate its very low and low income needs, so the City will consider amending its General Plan land use designations and/or zoning in order to accommodate the City's share of regional housing needs. The acreage, location, existing General Plan land use designation, existing zoning, proposed General Plan land use designation, and proposed zoning for each site identified for a change in allowed land use is shown in Table 2. Sites 2 through 7A (see Figure 2) would be rezoned from the existing zoning to RD-25 which will allow 20.1 to 30.0 dwelling units per acre. Sites C-1 through C-10, C-12 through C-38, and C-39 through C-41 would have the General Plan land use designation and zoning designation amended, as shown in Table 2. The Project would change allowed land uses on 393.5 acres in order to accommodate 7,371 high density residential units as shown in Table 2. Figure 2 depicts the location of each site proposed for General Plan land use and/or zoning changes.

TABLE 2: SITES PROPOSED FOR GENERAL PLAN LAND USE AND ZONING CHANGES

Map ID	Acreage	Location	Current Designations		Proposed Designations		Realistic Unit Capacity: Proposed Designation	Entitlement Status
			General Plan	Zoning	General Plan	Zoning		
2	12.4	East Franklin at SW corner of Quail Run Lane/Poppy Ridge Road and Bruceville Road	HDR	RD-20	HDR	RD-25	260	None
3	14	Laguna Ridge, SE corner of Poppy Ridge Road and Bruceville Road	HDR	RD-20	HDR	RD-25	294	None
4	9.6	Laguna Ridge, Bruceville Road just north of Bilby Road, just north of Seasons	HDR	RD-15	HDR	RD-25	201	None

Map ID	Acreage	Location	Current Designations		Proposed Designations		Realistic Unit Capacity: Proposed Designation	Entitlement Status
			General Plan	Zoning	General Plan	Zoning		
5	11.5	Laguna Ridge, between Whitelock Parkway and Poppy Ridge, next to future community park site	HDR	RD-20	HDR	RD-25	242	None
6	15	Waterman and Grant Line Road	HDR	RD-20	HDR	RD-25	315	Tentative map approved; no design review
7A	8.7[1]	East Stockton just south of Sheldon	C/O/MF	SC(MF)	HDR	RD-25	191	None
C-1	8.7	East Stockton Blvd just north of Sheldon Road	MDR	SPAC99	HDR	RD-25	182	None
C-2	6.5[2]	NW corner of Big Horn and Bruceville Road	RR	SPALCF	HDR	RD-25	137	None
C-6	7.0	Laguna West Town Center	C	LC	HDR	RD-25	146	None
C-7	5.6	Laguna West Town Center	LI	MP	HDR	RD-25	117	None
C-8	6.3	Calvine Road east of Elk Grove Florin Road	LDR	RD-7	HDR	RD-25	133	Approved Tentative Map and Design Review
C-9	8.0	Brown Road, south of Calvine Road near Elk Grove Florin Road	LDR	RD-5	HDR	RD-25	167	Approved tentative map
C-10	7.5	Stonelake, West Taron at Riparian	C	LC	HDR	RD-25	157	None
C-12	100.0	Southeast Policy Area[3]	SEPA	AG-20	HDR	RD-25	1,200	In process, consistent
C-13	3.9	Laguna West Town Center	HDR	RD-25	HDR	RD-25	82	None
C-14	3.9	Laguna West Town Center	HDR	RD-25	HDR	RD-25	82	None
C-15	3.0	Willard Parkway at Bilby Road	ER	AG-80	HDR	RD-25	62	None
C-16	3.4		ER	AG-80	HDR	RD-25	70	None
C-17	2.7		ER	AG-80	HDR	RD-25	56	None

Map ID	Acreage	Location	Current Designations		Proposed Designations		Realistic Unit Capacity: Proposed Designation	Entitlement Status
			General Plan	Zoning	General Plan	Zoning		
C-18	9.5	Laguna Ridge, SW corner of Poppy Ridge and Big Horn	HDR	AG-20	HDR	RD-25	200	None
C-19	0.9		HDR	AG-20	HDR	RD-25	19	None
C-20	1.6		HDR	AG-20	HDR	RD-25	34	None
C-21	4.4	Elk Grove Florin Road just south of Calvine	LDR	AR-5	HDR	RD-25	93	Prior application withdrawn
C-22	12.6	Brown Road, south of Calvine Road near Elk Grove Florin Road	LDR	AR-5	HDR	RD-25	265	None
C-23	18.2	Sheldon Road at Vytina Drive	LDR	AR-5	HDR	RD-25	383	None
C-24	16.3	Elk Grove Boulevard near Laguna Springs Drive (Capital Nursery site)	LDR	AR-5	HDR	RD-25	341	None (recently vacant)
C-25	3.4	Elk Grove Boulevard at Backer Ranch (next to Nugget)	LDR	AR-5	HDR	RD-25	71	Application in process, consistent
C-26	5.2	Stonelake, West Taron at Elk Grove Boulevard	LDR	AR-5	HDR	RD-25	109	Approval expired
C-27	9.4	Maritime, just west of Harbor Point	LDR	AR-5	HDR	RD-25	197	None
C-28	2.6	Laguna West Town Center	C	LC	HDR	RD-25	55	Approval expired
C-29	2.0	Laguna West Town Center	C	LC	HDR	RD-25	42	None
C-30	2.9	Laguna West Town Center	C	LC	HDR	RD-25	62	None
C-31	3.0	Harbour Point at Maritime	C	TC	HDR	RD-25	63	None
C-32	3.2	Elk Grove Boulevard, just west of Carlton Plaza	LDR	AR-2	HDR	RD-25	67	None
C-33	9.8	East Stockton Boulevard at Bow Street	C	SC	HDR	RD-25	206	None

Map ID	Acreage	Location	Current Designations		Proposed Designations		Realistic Unit Capacity: Proposed Designation	Entitlement Status
			General Plan	Zoning	General Plan	Zoning		
C-34	8.1	East Stockton Boulevard south of Bond Road, just north of Premier West Bank	HDR	RD-20	HDR	RD-25	171	None
C-35	3.7	East Stockton Boulevard at Banff Vista Drive	HDR	RD-20	HDR	RD-25	79	None
C-36	3.0	East Stockton Boulevard just south of Elk Grove Boulevard	C	AC	HDR	RD-25	62	None
C-37	4.3	East Stockton Boulevard at Hampton Oak Drive	C/O/MF	LC	HDR	RD-25	91	Approved tentative map and CUP
C-39	6.4	Laguna Boulevard and Bruceville Road	C/O/MF	SC	HDR	RD-25	135	Approved Tentative Map and Design Review
C-40	10.3	East Stockton Boulevard south of Calvine	LDR	SPAC99	HDR	RD-25	217	Approved tentative map (invalid)
C-41	15.0[4]	Sheldon/Bruceville /Big Horn/Lewis Stein	RR	SPALCF	HDR	RD-25	315	None
Total		**393.5 acres with capacity for 7,371 multifamily units**						

Notes:

[1] 9.7 acre site. Only 8.7 acres buildable due to reservation of 1 acre for drainage.

[2] 18 acre site. Only 6.5 acres assumed to be buildable due to floodplain.

[3] It is anticipated that the Southeast Policy Area will be adopted after the Housing Element. Therefore, the Housing Element includes a program requiring these units in the final plan for the Southeast Area.

[4] Total site is 150± acres. 15 acres are identified for HDR in existing General Plan policy LU-40.

Housing Program

Chapter 1 of the Housing Element establishes the City's housing program, which includes goals, policies, and actions to address the City's housing needs. The City's Housing Goals are described above under A, Project Goals. The policies support achievement of the Housing Goals. The actions established in Chapter 1 are specific steps that the City will take to address its housing needs. These actions are identified below. The majority of actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. The programs included in the Housing Element would not change the potential location of development, increase the intensity of development, or result in development that is not consistent with the growth allowed under the City's General Plan. However, the changes in land use designations and rezoning described above under Housing Sites will result in land use changes that could have an effect on the environment.

H-1 Action 1: To ensure adequate sites are available throughout the planning period to meet the City's RHNA, the City will continue to update annually or, as otherwise legally required, an inventory that details the amount, type, and size of vacant and underutilized parcels to assist developers in identifying land suitable for residential development and that also details the number of extremely low-, very low-, low-, and moderate-income units constructed annually. If the inventory indicates a shortage of available sites, the City shall rezone sufficient sites to accommodate the City's RHNA.

H-1 Action 2: As part of the Southeast Area Specific Plan process, the City shall require the Specific Plan to include approximately 50 gross acres to meet a portion of the City's lower-income housing needs. All rezoned sites will permit owner-occupied and rental multifamily developments by right and will not require a conditional use permit or any other discretionary review. All sites will accommodate a minimum of 20 units per acre and at least 16 units per site, pursuant to State law requirements.

H-2 Action 1: Continue to allow corner duplexes in single-family residential developments without a use permit.

H-3 Action 1: Continue to encourage multifamily development throughout the City. Utilize the following non-binding guidelines in the analysis process of identifying opportunity locations for new multifamily housing:

(a) proximity to public transit or bus service;

(b) proximity to commercial and social services;

(c) parcel size and configuration which enhances the feasibility of development;

(d) lack of physical constraints (noise, wetlands);

(e) provision for a variety of housing types and affordable housing opportunities;

(f) appropriate size to provide for on-site management of the facility;

(g) integration and compatibility with surrounding development; and

(h) proximity to other multifamily development.

The City may also consider other criteria, as it deems appropriate, in order to determine the feasibility and potential constraints of new multifamily development.

H-3 Action 2: Offer fast track/priority processing, density bonuses, flexibility in development standards, and fee subsidies (when feasible) to developers proposing new housing, mixed-use, or infill projects affordable to lower-income households, farmworkers, seniors, and other special needs groups.

H-4 Action 1: Continue to support affordable housing development through financial assistance from sources such as Community Development Block Grant (CDBG), Affordable Housing Fund, Very Low Income Housing Trust Fund, CalHome, and other HUD or HCD funding, as feasible.

H-4 Action 2: Continue to provide waivers of select fees to all affordable housing projects and participate in the Sacramento County Regional Sanitation Board's fee waiver

and deferral program to reduce impact fees for affordable housing development.

H-4 Action 3: Offer affordable housing funding sources through the issuance of an RFP process consistent with the City's Affordable Housing Loan Program guidelines, or other process as approved by the City Council.

H-5 Action 1: Continue to apply for HOME and CalHome funds for homebuyer assistance programs as they are available and when the City is eligible. Continue to administer the Affordable Homeownership Program, which provides limited fee waivers for deed-restricted for-sale affordable housing units. Information on these programs will be advertised on the City's website when funds or homes are available.

H-5 Action 2: Continue to partner with NeighborWorks to provide homeownership services, such as homebuyer education and one-on-one or group counseling.

H-6 Action 1: Continue to promote and support energy efficiency in new construction by encouraging developers to utilize SMUD energy programs and other energy efficiency programs and to be consistent with the Sustainability Element of the General Plan and the City's Climate Action Plan.

H-6 Action 2: Continue to encourage participation in SMUD's PV (photovoltaic) Pioneer program by issuing PV system permits at no charge upon SMUD's approval.

H-7 Action 1: Continue to allow flexibility in development standards, such as smaller unit sizes and parking reductions for senior projects, and by allowing development using universal design measures.

H-7 Action 2: Continue to contribute funding and work closely with local nonprofits and regional agencies to assess homeless needs and develop plans to address homelessness at a regional level. The City will annually meet with local service providers and regional agencies (as applicable) to assess the homeless needs of the City and the region.

H-7 Action 3: Continue to procure funding sources that will allow the City to contribute to agencies that provide services for persons with special housing needs.

H-8 Action 1: Continue to update the affordable housing unit database and to provide information regarding affordable housing opportunities, both through direct response to inquiries and making information available on the City's website.

H-9 Action 1: Continue to review the appropriateness of providing regulatory incentives for units affordable to extremely low-, very low-, and low-income households, including second dwelling units, senior housing, and apartment units, and housing for special needs groups, including agricultural employees, persons with disabilities (including developmental disabilities), and individuals and families in need of emergency/transitional housing. Based upon this review, take subsequent action, as appropriate, to make the development of such units more financially feasible. Consider providing financial incentives, such as reducing, waiving, and/or deferring fees, where feasible.

H-10 Action 1: Continue to designate a staff planner to guide affordable housing development projects through the planning process and designate the Housing Program Manager to implement housing-related programs and policy initiatives.

H-10 Action 2: Continue to allow the Planning Director to serve as the approving authority on all multifamily projects of 150 units or less, including affordable projects, that are consistent with General Plan and zoning requirements.

H-10 Action 3: Continue to conduct interdepartmental meetings to coordinate the early review of development projects and address policy concerns.

H-11 Action 1: Continue to encourage more creative and flexibly designed projects with an affordable housing component through the use of the Design Review process, which eliminated minimum lot width and public street frontage requirements, thus creating more flexibility for higher-density projects.

H-11 Action 2: Consider adopting a Universal Design Ordinance that would encourage construction or modification of new and existing homes using design principles that allow individuals to remain in their homes as their physical needs and capabilities change.

H-12 Action 1: Continue to annually review the Housing Element to determine its effectiveness and its consistency with the General Plan, as part of the annual review required by Government Code Section 65400. Report on the findings of this review and suggest changes if needed.

H-13 Action 1: Continue to operate housing repair and/or rehabilitation programs that assist lower-income households occupying housing in need of repair, including the new Minor Home Repair program that offers forgivable loans to very low- and low-income homeowners whose homes have one or more health and safety hazards.

H-13 Action 2: Continue to refer individuals interested in utility assistance to the appropriate local energy provider, usually SMUD or PG&E, both of which offer programs to assist with utility costs.

H-13 Action 3: Provide information on available housing rehabilitation programs, such as the Minor Home Repair Program, to homeowners experiencing difficulty repairing health and safety hazards.

H-13 Action 4: Consider a rental inspection program that is administered by the Code Enforcement Department with the goal of enforcing Municipal Code standards for rental housing.

H-14 Action 1: If the one mobile home park in the City is in danger of being removed from the housing stock, partner with tenant associations or a nonprofit organization to provide assistance to mobile home park tenants in preserving their homes through the State Mobilehome Park Resident Ownership Program (MPROP), when appropriate.

H-15 Action 1: Monitor and evaluate the conversion of rental housing units to condominiums in order to assist in amending the land use plan to provide for additional multifamily areas if necessary.

H-16 Action 1: Continue to provide information about fair housing choices to residents by distributing the fair housing materials on request. Promptly address complaints of discrimination in the sale, rent, and development of housing.

H-16 Action 2: Continue to enforce the City's Design Guidelines, which require a minimum of one on-site amenity for multifamily development. These amenities may include child care centers, clubhouses, or other recreational facilities.

H-17 Action 1: Maintain and update the City's affordable housing database as a mechanism to monitor and identify units at risk of losing their affordability subsidies or requirements.

H-17 Action 2: Continue to work with federal, State, and nonprofit housing organizations that function to purchase or fund the purchase of subsidized, at-risk complexes that the owner wishes to convert to market rate. Annually evaluate the need for the City to establish a program to preserve affordable units at risk of conversion.

H-17 Action 3: Consider a Housing Choice Voucher ("Section 8") education program for residents (neighbors) and landlords to provide awareness of the program and the opportunities and constraints it provides.

D. REQUIRED APPROVALS AND PERMITS

Actions to be taken by the City to adopt the Project include, but are not limited to:

- Certification of the Environmental Impact Report prepared for the Project;
- Adoption of a General Plan Amendment to update the Housing Element and to revise the Land Use Map as described in Table 2;
- Amendment of the Zoning Map to rezone sites as described in Table 2; and
- Modification of the RD-25 zoning district to adjust the allowed density range from 20.1 to 25.0 dwelling units per acre to 20.1 to 30.0 dwelling units per acre.

Subsequent actions taken by the City may include, but are not limited to:

- Approval, construction, and operation of subsequent development proposals; and
- Implementation of various actions within the Housing Element.

After adoption, the updated Housing Element will be submitted to the State Department of Housing and Community Development for certification. Adoption of the Housing Element, including implementation of subsequent reasonably foreseeable actions, is not anticipated to require any approvals or permits from other local, regional, state or federal agencies.

E. ENVIRONMENTAL IMPACT REPORT

The EIR for the Housing Element Update will be a Program EIR, as described at Section 15168 of the CEQA Guidelines. A Program EIR is an EIR that may be prepared on a series of actions that can be described as one large project, but which may occur as series of individual projects. A Program EIR provides an opportunity for more exhaustive consideration of potential environment effects, in particular cumulative impacts and project alternatives than would be practical if environmental review documentation were prepared separately for each individual project falling under the larger program. The EIR will analyze the potential effects of implementing the policies and programs of the proposed Housing Element Update and associated General Plan land use amendments and rezones based on the mandatory impact categories specified in the CEQA environmental checklist (Appendix G of the CEQA Guidelines).

F. PROBABLE ENVIRONMENTAL EFFECTS

The EIR will discuss whether the Housing Element would result in environmental effects associated with the following issue areas, as identified on the CEQA Checklist Form of Appendix G of the CEQA Guidelines:

- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Noise
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems
- Mandatory Findings of Significance

ISSUES SCOPED OUT FROM ANALYSIS IN THE EIR

Some of the environmental issues would result in less than significant impacts or would have no impact. These issues will not be discussed in the EIR for the reasons discussed below.

Aesthetics

Scenic Vistas and Scenic Resources/Degrade Existing Visual Character
There are no designated scenic vistas, scenic resources, or State scenic highways in the City. Therefore, the Project would not adversely affect a designated scenic vista, scenic resource, or State scenic highway.

The General Plan Draft EIR (City of Elk Grove, 2003b) anticipated urbanization of the City and identified that implementation of the General Plan would result in a significant and unavoidable impact associated with conversion of the region's rural landscape to residential, commercial, and other land uses even with implementation of mitigating General Plan policies and actions, including Policies CAQ-8 and LU-35 and associated implementing actions, as described under Impact 4.13.1 (City of Elk Grove, 2003b; pp. 4.13-5 – 4.13-60). The Project would result in development and urbanization in areas anticipated to be developed in the General Plan and General Plan EIR. Subsequent development would be required to be consistent with the General Plan, including Policies CAQ-8 and LU-35 and associated implementing actions, and with the Elk Grove Design Guidelines, which address site design, architecture, landscaping, and lighting. Implementation of the Project would not result in new or substantially more sever impacts to the City's visual character beyond those addressed in the General Plan Draft EIR and Final EIR. This topic will not be addressed further in the EIR.

Create New Source of Substantial Light or Glare
The General Plan Draft EIR anticipated urbanization of the City and identified that implementation of the General Plan would result in an increase in daytime glare and that implementation of General Plan Policy LU-35 and associated implementing actions and the City's Design Guidelines (MM 4.13.2) would reduce potential impacts to less than significant, as described under Impact 4.13.2 (City of Elk Grove, 2003b; pp. 4.13-6 – 4.13-7).

The General Plan Draft EIR also disclosed that implementation of the General Plan would increase the amount of nighttime lighting and create new sources of nighttime lighting and that implementation of General Plan policies, including Policy LU-35 and associated implementing actions, and the City's Design Guidelines (MM 4.13.2) would reduce potential nighttime lighting impacts to less than significant, as described under Impact 4.13.3 (City of Elk Grove, 2003b, pp. 4.13-7 – 4.13-8). Implementation of the Project would result in light and glare impacts comparable to those associated with implementation of the adopted General Plan and would not result in any new or substantially more severe impacts beyond those addressed in the

General Plan Draft EIR and Final EIR (City of Elk Grove, 2003b, 2003d). This topic will not be addressed further in the EIR.

Agricultural and Forest Resources

Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Nonagricultural Use/Conflict with Existing Agricultural Zoning or a Williamson Act Contract

As described under Impact 4.1.1 of the General Plan Draft EIR (City of Elk Grove, 2003b), subsequent land use development and associated public improvements (e.g., roadway improvements, infrastructure facilities, parks and public schools) within the current City limits would result in the conversion of important farmland. Future development is anticipated to result in the conversion of Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Unique Farmland. In addition to the loss of important farmlands, implementation of the General Plan would also result in the conversion of farmland areas currently protected under Williamson Act contracts in the southern portions of the City and would place urban uses adjacent to agricultural uses. The Project would result in development and urbanization in areas anticipated to be developed in the General Plan and General Plan EIR. The General Plan Draft EIR concluded that impacts related to the conversion of farmland would be significant and unavoidable, even with the implementation of mitigating General Plan Policies CAQ-2, CAQ-3, LU-12, and PTO-15 and associated actions (City of Elk Grove, 2003a, pp. 4.1-15 through 4.1-18). The General Plan Draft EIR concluded that impacts related to the urban/agricultural interface and conflicts with agricultural uses would be significant and unavoidable, even with the implementation of mitigating General Plan Policies CAQ-4 and LU-34 and associated actions (City of Elk Grove, 2003a, pp. 4.1-18 through 4.1-20).

Subsequent development would be required to be consistent with the General Plan, including CAQ-2, CAQ-3, CAQ-4, LU-12, and PTO-15 and associated actions. The Project would not convert agricultural lands or conflict with agricultural uses beyond what has been identified in the General Plan (City of Elk Grove, 2003a) and considered in the General Plan EIR (City of Elk Grove, 2003d). Implementation of the Project would not result in any new or substantially more severe impacts regarding conversion of farmland, conflicts with agricultural zoning, and conflicts with a Williamson Act contract beyond those addressed in the General Plan Draft EIR and Final EIR. This topic will not be addressed further in the EIR.

Convert Forest Land to Non-Forest Use

The City does not contain any land zoned for forest land, timberland, or timberland production nor are there any forested areas in the City. Therefore, no impact to forest land or timberland would occur. This topic will not be discussed in the EIR.

Cultural Resources

The General Plan Draft EIR anticipated urbanization of the City and identified that implementation of the General Plan would result in a less than significant impacts to cultural and paleontological resources with implementation of General Plan Policies HR-1, HR-2, HR-3, HR-4, HR-6, and associated actions which protect cultural and historic resources and provide guidance if previously undiscovered cultural resources or human remains are encountered, as described under Impacts 4.11.1 and 4.11.2 (City of Elk Grove, 2003b, pp. 4.11-8 - 4.11-13). The Project would accommodate development in areas anticipated for development in the General Plan. Associated subsequent projects would be required to comply with General Plan policies and actions and would not result in new or substantially more severe impacts to historic, cultural, or paleontological resources nor to human remains beyond those impacts analyzed in the General Plan Draft EIR and Final EIR (City of Elk Grove, 2003b, 2003d). This topic will not be addressed in the EIR.

Geology and Soils

Seismic, Geologic, and Soils Hazards

The General Plan Draft EIR anticipated urbanization of the City and identified that implementation of the General Plan would result in less than significant impacts associated with soil erosion with implementation of General Plan Policies CAQ-5 and CAQ-12 and associated actions, as described under Impact 4.9.1 (City of Elk Grove, 2003b, pp. 4.9-8 – 4.9-9). The General Plan Draft EIR identified that implementation of the General Plan would result in less than significant impacts associated with seismic hazards with implementation of General Plan Policy SA-25 and the associated action that relate to seismic safety, as described under Impact 4.9.3 (City of Elk Grove, 2003b, p. 4.9-10). The General Plan Draft EIR identified the impacts associated with expansive and unstable soils would be reduced to less than significant with implementation of General Plan Policy SA-25 and the associated actions as well as implementation of MM 4.9.2 which requires that development projects prepare a geotechnical report that addresses soil stability, as described under Impact 4.9.2 (City of Elk Grove, 2003b, p. 4.9-9 – 4.9-10). The Project would not result in development in areas not considered for development in the General Plan Draft EIR and Final EIR and would not result in any new or substantially more severe impacts associated with seismic hazards, soil erosion, soil instability, or expansive soils, as future projects would be required to comply with General Plan policies and mitigation identified in the General Plan EIR. This issue will not be addressed further in the EIR.

Use of Septic Systems

All sites proposed by the Housing Element for a General Plan Amendment and/or rezone to accommodate high density housing would be served by the public sewer system, operated by the Sacramento Area Sanitation District. Septic tanks or alternative wastewater disposal systems are not proposed. Thus, there would be no impact related to septic tanks or alternative wastewater disposal systems. Impacts related to this topic will not be discussed in the EIR.

Mineral Resources

No significant mineral resources have been identified in the City. None of the potential housing sites are used for mineral extraction, nor are any of the sites designated as an important mineral recovery site. Therefore, there will be no impact. This issue will not be discussed in the EIR.

Habitat Conservation Plan or Natural Community Conservation Plan

There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan that applies to Elk Grove. Therefore, no impact would occur. This topic will not be discussed in the EIR.

Airports, Airstrips, and Air Traffic Patterns

The airports nearest to the City of Elk Grove are Franklin Field, approximately five miles to the south, and Sacramento Executive Airport, over five miles to the north. The City is not located within the safety or noise zones of either airport. Thus, there would be no impacts associated with conflicts with airports, changes in air traffic patterns, or airport-related noise. This topic will not be discussed in the EIR.

Wildland Fires

The City of Elk Grove is not located within the Very High FHSZ, as shown in the Fire Hazard Severity Zoning Map for Sacramento County (CalFire, 2008), nor is the City located in a designated Wildland-Urban Interface Fire Areas. There is no impact associated with wildland fires. This topic will not be discussed in the EIR.

Seiche, Tsunami, and Mudflow

Based on the City's location (inland and away from large water bodies) and topography (relatively flat), there would be no impacts related to seiche, tsunami, or mudflow. This impact will not be discussed in the EIR.

Physical Division of Existing Communities

Sites identified in the Housing Element for potential housing development are infill, vacant, or underdeveloped sites. Development associated with the Housing Element would not divide existing communities and the project does not propose any barriers, such as wide roadways, that would physically divide an existing community. There is no impact and this topic will not be discussed in the EIR.

Population/Housing

Induce Substantial Population Growth

The Housing Element Update provides a plan to accommodate the City's current housing needs, as well as the City's fair share of the RHNA. The RHNA is based on the State's projected housing growth. HCD allocates each region's "fair-share" of the statewide housing need to each regional government. SACOG then allocates the Sacramento region's housing allocation to each local jurisdiction, including the City of Elk Grove. The Housing Element demonstrates the City's ability to accommodate its housing allocation, as allocated by the State HCD via SACOG. As the Housing Element demonstrates the City's ability to accommodate growth that has been planned by the State consistent with the requirement of State law, it would not induce growth as it only addresses growth that is already present or projected by the State and SACOG. There is no impact and this issue will not be discussed in the EIR.

Displace Significant Numbers of Persons or Housing Units

The Housing Element does not propose any development and would not displace persons or housing units. Future development accommodated by the Housing Element may result in the displacement of a small number of persons or housing units, but would also result in replacement housing on the site. Therefore, this impact would be less than significant and will not be discussed in the EIR.

REFERENCES

City of Elk Grove 2003a. *City of Elk Grove General Plan.* Adopted November 19, 2003. Elk Grove, California.

City of Elk Grove 2003b. *City of Elk Grove General Plan, Volume 1: Draft Environmental Impact Report, SCH #: 2002062082.* Published August 2003, revised and certified October 2003. Elk Grove, California.

City of Elk Grove 2003c. *Elk Grove Design Guidelines.* Adopted March 19, 2003, amended through April 11, 2007. Elk Grove, California.

City of Elk Grove 2003d. *City of Elk Grove General Plan Final Environmental Impact Report, SCH #: 2002062082.* Certified October 2003. Elk Grove, California.

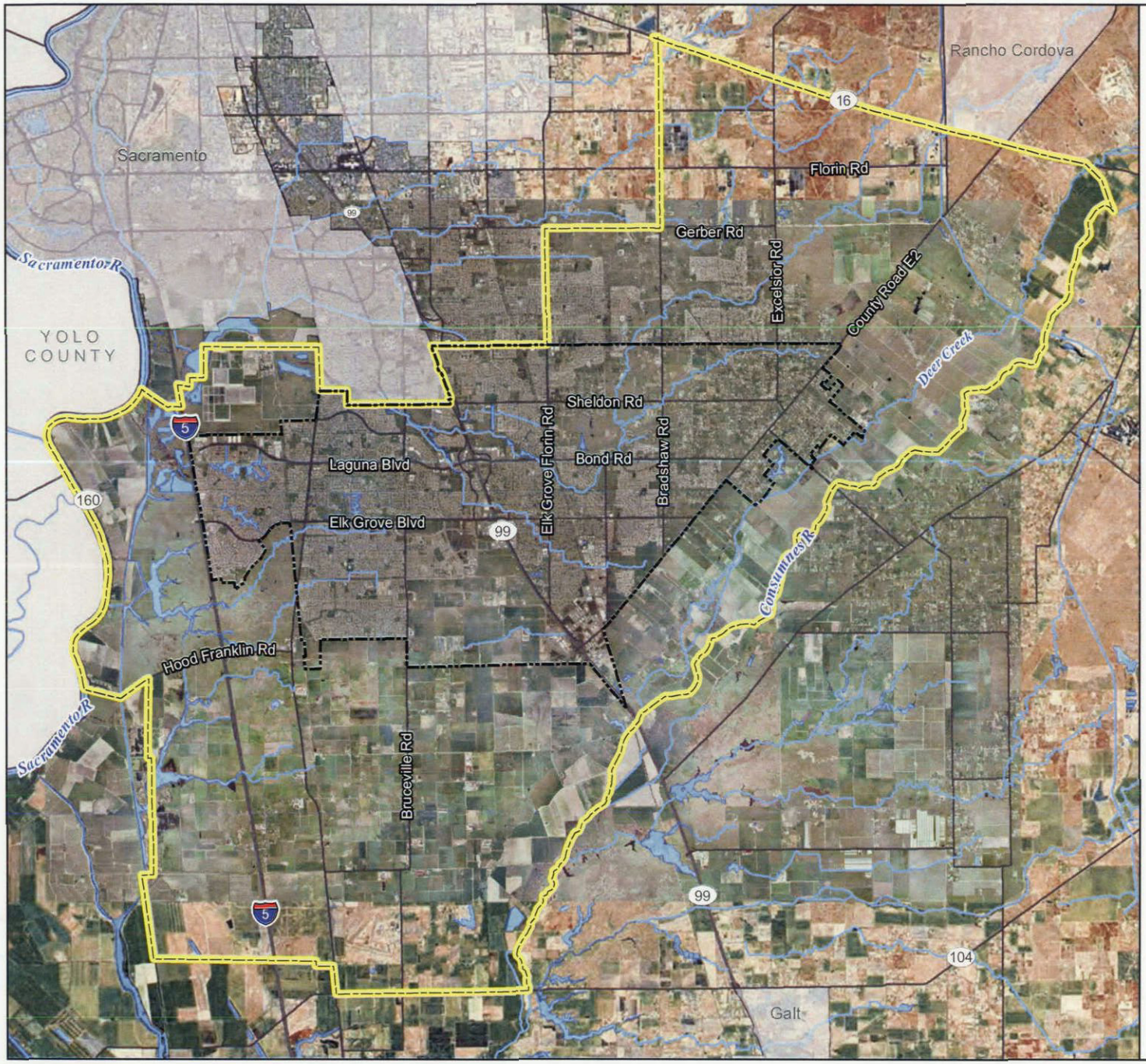


Figure 1: Project Location

City of Elk Grove

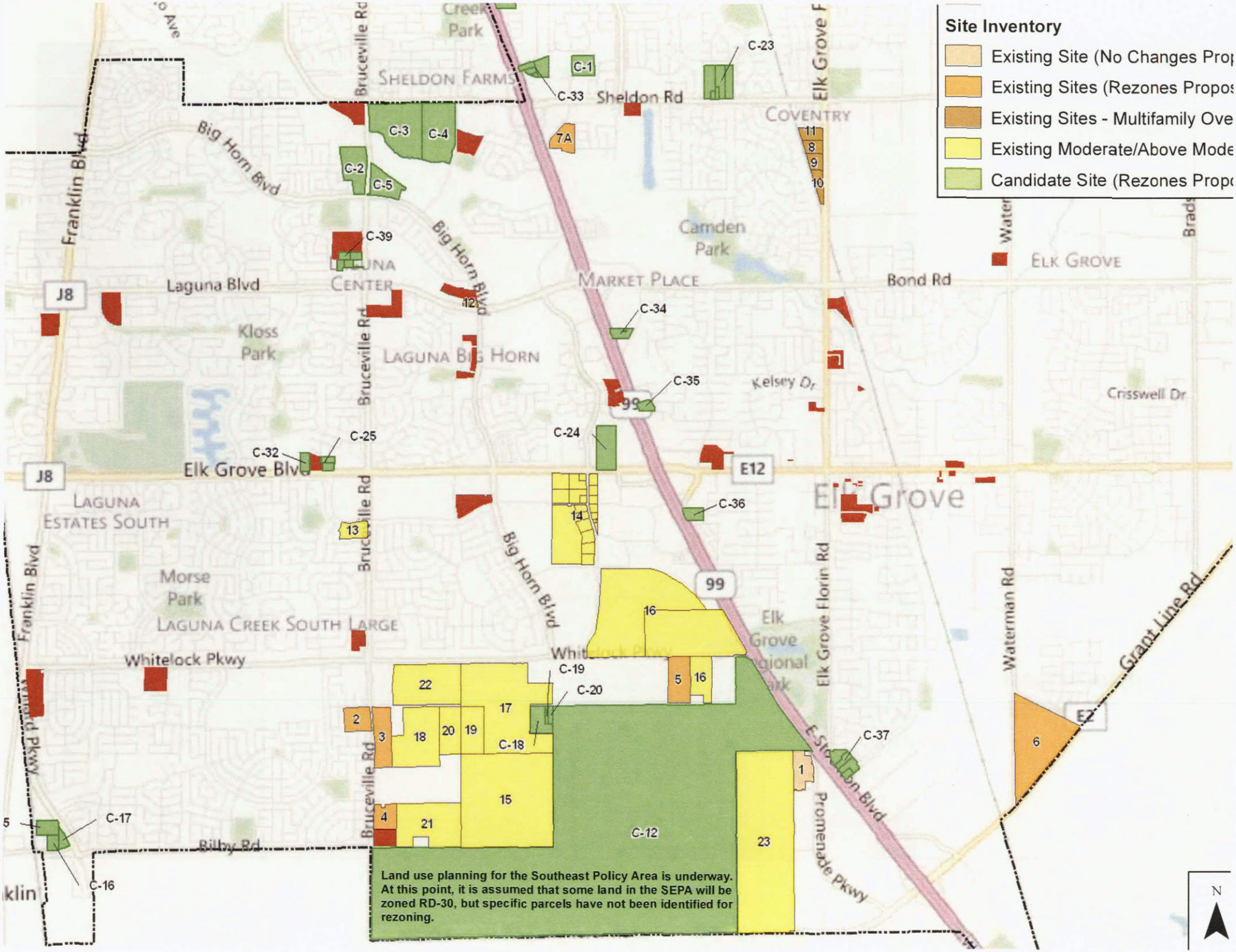
Elk Grove Planning Area

0 0.5 1 2 3 Miles

1:165,000

Data sources: Sacramento County GIS data library, City of Elk Grove GIS, ESRI's StreetMap North America, ArcGIS Online Bing Aerials.
Map date: April 20, 2011.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm


Site Inventory
Existing Site (No Changes Prop
Existing Sites (Rezones Propos
Existing Sites - Multifamily Ove
Existing Moderate/Above Mode
Candidate Site (Rezones Propo
Land use planning for the Southeast Policy Area is underway. At this point, it is assumed that some land in the SEPA will be zoned RD-30, but specific parcels have not been identified for rezoning.
Sheldon Farms
Sheldon Rd
Coventry
Elk Grove
Bond Rd
Laguna Blvd
Big Horn Blvd
Bruceville Rd
Franklin Blvd
Kloss Park
Laguna Big Horn
Market Place
Laguna Center
Camden Park
Kelsey Dr
Crisswell Dr
Elk Grove Blvd
Laguna Estates South
Morse Park
Laguna Creek South Large
Whitelock Pkwy
Elk Grove Florin Rd
Waterman Rd
Grant Line Rd
Promenade Pkwy
Bilby Rd
J8
E12
E2
99
C-1
C-2
C-3
C-4
C-5
C-12
C-16
C-17
C-18
C-19
C-20
C-23
C-24
C-25
C-32
C-33
C-34
C-35
C-36
C-37
C-39
7A
N

DEPARTMENT OF TRANSPORTATION
703 B STREET
MARYSVILLE, CA 95901
PHONE (530) 741-5452
FAX (530) 741-5346
TTY 711
www.dot.ca.gov

Flex your power!
Be energy efficient!

September 3, 2013

FMP #032013-SAC-0111
03-SAC 99/I-5/PM VAR
SCH# 2013082012

Ms. Sarah Bontrager
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

City of Elk Grove Housing Element Update NOP

Dear Ms. Bontrager:

Thank you for including the California Department of Transportation (Caltrans) in the Notice of Preparation (NOP) review process for the City of Elk Grove Housing Element Update. The Housing Element identifies land use changes to 42 sites to accommodate housing growth and housing sites totaling 393.5 acres to accommodate 7,402 multi-family units. State Route (SR) 99 and Interstate 5 (I-5) are within the planning area for the Housing Element. The following comments are based on the NOP.

Traffic Impact Study (TIS)

Based on the project location, Caltrans anticipates potentially significant impact to SR 99 and I-5 when an intensification of traffic-generating development occurs at volumes sufficient to impact the operations of the mainline, interchange and nearby ramps of SR 99 and I-5.

Therefore, a TIS may be required to assess impact of this particular project on the State Highway System and adjacent road network, with specific attention to SR 99/I-5.

We recommend using Caltrans' *Guide for the Preparation of Traffic Impact Studies* (*TIS Guide*) for determining which scenarios and methodologies to use in the analysis. The *TIS Guide* is available at the following website address: http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf.

If you have any questions regarding these comments or require additional information, please contact Sukhi Johal, Intergovernmental Review Coordinator for Sutter County at (530) 740-4843or by email: sukhi johal@dot.ca.gov.

Sincerely,

David R. VanDyken

DAVID VAN DYKEN, Chief
Office of Transportation Planning –North

Gmail by Google

Beth Thompson <bthompson@denovoplanning.com>

FW: Public Comment on Environment Impact Report for High Density Housing in Stone Lake.

1 message

Sarah Bontrager <sbontrager@elkgrovecity.org> Fri, Aug 30, 2013 at 8:52 AM
To: Beth Thompson <bthompson@denovoplanning.com>

For the EIR.

From: Ian Davidson [mailto:ian.n.davidson@gmail.com]
Sent: Friday, August 30, 2013 8:51 AM
To: Sandy Kyles; Sarah Bontrager
Cc: Gary Davis; Frank Maita; George Murphey; Nancy Chaires; Fedolia Harris; Brian Villanueva; James Cooper
Subject: Public Comment on Environment Impact Report for High Density Housing in Stone Lake.

Dear Ms Sarah Bontrager,

Please confirm receipt of this email.

I wish to express my concerns at the proposed rezoning to high density housing of lots C-10, C-26, C-27, and C-31 in and directly opposite the **Stonelake neighborhood.** Rezoning these to high density will add over 500 apartments to our small community of only 1400 homes which will have a dramatic effect on its character and the vision of the master planned community approved by Sacramento County.

While we understand affordable housing is required as part of the Housing Element plan we believe it should not be on those lots for the following reasons.

a) Stonelake already has its fair share of high density homes within 1/2 mile (over 600+ apartment homes in the StoneLake Apartments and Somerfield Apartments alone). Adding more high density housing to the Stone Lake

neighborhood will make the area unbalanced in terms of housing type composition. Recall we only have 1400 homes in our community.

b) **The local elementary school zoned to Stonelake (Elliot Ranch) is already heavily impacted.** Putting more homes within these school boundaries will only exacerbate the problem. Just this year 17 first graders' (six year olds) who live within the school boundaries had to be bused out to neighboring schools.

c) The Master Planned Community Approved by Sacramento County Before Annexation is a Well Thought Out and Balanced Allocation of Residential and Commercial Uses.

Zones C10 and C26 are zoned Limited Commercial (LC). The limited commercial district is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods". This is a perfect zoning for these properties given the lack of retail businesses on the west side of Elk Grove. Currently most homeowners drive to east of Bruceville road for most commercial transactions.

d) The city has recommended these lots be zoned RD-25. This is completely incompatible with the city's own planning ethos.

The RD-25 district allows the maximum residential density permitted in the City, thirty (25) dwelling units per acre and as much as three stories tall. The City encourages the location of RD-25 sites near commercial or office centers or near light industrial uses or other centers of employment. The west side of Elk Grove has sparse commercial/office centers and is not near any centers of employment of significance or public transportation to such entities.

Kind Regards,

Ian Davidson

By sending us an email (electronic mail message) or filling out a web form, you are sending us personal information (i.e. your name, address, email address or other information). We store this information in order to respond to or process your request or otherwise resolve the subject matter of your submission.

Certain information that you provide us is subject to disclosure under the California Public Records Act or other legal requirements. This means that if it is specifically requested by a member of the public, we are required to provide the information to the person requesting it. We may share personally identifying information with other City of Elk Grove departments or agencies in order to respond to your request. In some circumstances we also may be required by law to disclose information in accordance with the California Public Records Act or other legal requirements.

LAW OFFICES OF
GREGORY D. THATCH
1730 I Street, Suite 220
SACRAMENTO, CA 95811-3017
Telephone (916) 443-6956
Facsimile (916) 443-4632
www.thatchlaw.com

GREGORY D. THATCH
LARRY C. LARSEN
MICHAEL DEVEREAUX
RYAN M. HOOPER

WASHINGTON, DC OFFICE
1225 I Street, N.W., [illegible]
WASHINGTON, DC [illegible]
Telephone (202) [illegible]
Facsimile (202) [illegible]

August 30, 2013

VIA U.S. MAIL AND ELECTRONIC MAIL

Sarah Bontrager
Housing Program Manager
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

Re: Housing Element Update Notice of Preparation

Dear Ms. Bontrager:

As you know, this office represents the Laguna West Association with respect to the City's Housing Element update. We have reviewed the Notice of Preparation ("NOP") associated with the Environmental Impact Report ("EIR") for the Housing Element update and write in order to offer the following comments.

As part of the City's Housing Element update, the City has identified seven (7) sites in the Laguna West Master Plan ("Laguna West") area of Elk Grove for rezoning to high density residential land uses, which total approximately twenty-eight (28) acres and could accommodate as many as five hundred eighty-six (586) high density residential units, all within an approximate one quarter (1/4) mile radius. Additionally, Laguna West already includes existing high density residential developments, such as Siena Villas and Castellino at Laguna West, which together comprise approximately four hundred fifty-six (456) high density residential units, all within the same one quarter (1/4) mile radius. Together, the existing high density residential units and the additional future units that would be permitted as part of the City's proposed Housing Element update could result in approximately one thousand forty-two (1,042) high density residential units all within a one quarter (1/4) mile radius. This represents a massive amount of residential density for such a small geographic area, which would undoubtedly result in significant environmental impacts.

Consequently, it is imperative that the EIR examine the issues that could arise with this incredible concentration of high density residential land uses and the vast number of affordable housing units that will likely be squeezed into a relatively small area of Laguna West. These issues include, but are not limited to, public services, transportation/traffic, and utilities/service systems. As you are aware, many of the existing services and public facilities are already heavily impacted, which has been a deep concern for many in Laguna West.

In addition, pursuant to CEQA Guideline 15131, the potential increase in population that could result from the planned high density residential densities in Laguna West could well have implications relative to economic and social effects relating to blight and urban decay that will

impact virtually all matters being reviewed in the Housing Element update EIR. including the need for increased police and fire services. which has been a continued source of concern for many Laguna West residents.

The Housing Element update NOP identified several environmental issues that would not be analyzed as part of the EIR. as the City has determined that these issues would result in less than significant impacts or would have no impacts. However. as discussed below. there could well be foreseeable impacts related to aesthetics.

The NOP provides that the Housing Element update would result in less than significant impacts or would have no impacts relative to aesthetics. due primarily to the fact that the General Plan anticipated urbanization in the City. However. many of the sites being proposed for rezoning to high density residential land uses have long been planned for retail and office uses as part of the Laguna West Master Plan. Thus. while the General Plan contemplated urbanization within the City. the General Plan did not contemplate a significant change in the type of urbanization or the significant concentration of such uses. The high concentration of high density residential land uses that are being considered for Laguna West as part of the Housing Element update will very likely require large. multi-story structures in place of retail centers and campus style office parks that were the vision of the well thought out. and well designed. Laguna West Master Plan. Consequently. the Housing Element's inconsistency with the Laguna West Master Plan could surely have negative aesthetic impacts that warrant analysis as part of the Housing Element update EIR. as medium rise high density residential buildings are going to differ significantly from low rise retail and office campus development. It is simply a very different look than what was envisioned by the Laguna West Master Plan. which so many residents and business owners relied upon when deciding to locate in Laguna West.

We appreciate having the opportunity to provide comments regarding the scope of analysis of the Housing Element update EIR. Should you have any questions. please do not hesitate to contact our office.

Very truly yours.

LAW OFFICES OF
GREGORY D. THATCH

RYAN M. HOOPER

RMH/hb
H0359.docx

cc: Members of the City of Elk Grove Planning Commission
Taro Echiburu, City of Elk Grove
Jeannette Mitchell, Laguna West Homeowners Association

joulia dib <jouliad@hotmail.com>
August 12, 2013 5:06 PM
To: Sandy Kyles <skyles@elkgrovecity.org> and 7 more...
Regarding Notice of Preparation of an EIR for the Housing Element

---

Dear Ms. Bontrager,

I am writing to express my concerns at the proposed rezoning to high density housing of lots C-10, C-26, C-27, and C-31 in the **Stonelake neighborhood**. Rezoning these to RD-20, RD-25 or RD-30 could add over 600 apartments to our small community which will have a dramatic effect on its character. While we understand affordable housing is required as part of the Housing Element plan we believe it should not be on those lots for the following reasons.

i) Stonelake already has its fair share of high density homes. Adding more high density housing to the Stone Lake neighborhood will make the area unbalanced in terms of housing type composition.

The Stonelake neighborhood consists of 1,467 single family homes and a further 432 apartment homes in the Stonelake Apartment complex, which amounts to over 22% high density housing units already in the Stonelake neighborhood. Furthermore, directly across Elk Grove Blvd facing our community is the Boardwalk at Lakeside apartment complex and less than half a mile down Harbor Point Drive is Somerfield At Lakeside Apartments which adds a further 500+ apartment homes to the immediate area.

ii) **The local schools zoned to Stonelake are already heavily impacted.** Putting more homes within these school boundaries will only exacerbate the problem.

Elliott Ranch Elementary School, is a California Distinguished school and already impacted (children living within the school boundaries are bussed to other schools). Furthermore, the overflow schools for Elliot Ranch (Stonelake and Joseph Sims) are also regularly impacted. If more homes are added to this school's boundaries where will these additional children go to school and how will it be determined which children go to the local school. Similar arguments can be made for the middle and high schools.

iii) The Master Planned Community Approved by Sacramento County Before Annexation is a Well Thought Out and Balanced Allocation of Residential and Commercial Uses.

Stonelake as a master planned community was sold to its initial and subsequent owners as a mixture of housing and commercial property. Zones C10 and C26 are zoned Limited Commercial (LC). The limited commercial district is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods". This is a perfect zoning for these properties given the

lack of retail businesses on the west side of Elk Grove. Currently most homeowners drive to east of Bruceville road for most commercial transactions.

iv) The existing commercial development adjacent to (lots C26 and C10), Stonelake Landing shopping center, consists of 40+ high end stores of which the vast majority are vacant.

The area needs a larger mass of commercial stores or an anchor store for this shopping center to survive. Converting C26 and C10 to residential lots will further retard the growth of Stonelake Landing shopping center.

v) The city has recommended these lots be zoned RD-30. This is completely incompatible with the city's own planning ethos.

The RD-30 district allows the maximum residential density permitted in the City, thirty (30) dwelling units per acre and as much as three stories tall. The City encourages the location of RD-30 sites near commercial or office centers or near light industrial uses or other centers of employment. The west side of Elk Grove has sparse commercial/office centers and is not near any centers of employment of significance or public transportation to such entities.

Thank you for your attention in this matter.

Sincerely,
Joulia Dib
3216 East Pintail Way
Elk Grove, Ca, 95757
jouliad@hotmail.com

Subject: Fwd: Notice of Preparation of an EIR for the Housing Element Update
From: jouliad@hotmail.com
Date: Sun, 11 Aug 2013 12:03:25 -0700
To: jouliad@hotmail.com

Respond and forward

Sent from my iPad

Begin forwarded message:

From: Sandy Kyles <skyles@elkgrovecity.org>
Date: August 6, 2013, 6:13:39 PM PDT
To: 'Hotmail Joulia' <jouliad@hotmail.com>
Subject: RE: Notice of Preparation of an EIR for the Housing Element Update

Absolutely and you may send them to my email account. skyles@elkgrovecity.org

Sandy

From: Hotmail Joulia [mailto:jouliad@hotmail.com]
Sent: Monday, August 05, 2013 5:42 PM
To: Sandy Kyles
Subject: Re: Notice of Preparation of an EIR for the Housing Element Update

Hi Ms. Kyles,

Can comments be submitted via email? And if so, what email account should we send it to?

Thank you
Joulia Dib

Sent from my iPhone

On Aug 2, 2013, at 11:27 AM, Sandy Kyles <skyles@elkgrovecity.org> wrote:

NOTICE OF PREPARATION

DATE:	**August 2, 2013**
TO:	**Office of Planning and Research, Responsible and Trustee Agencies**
LEAD AGENCY:	**City of Elk Grove** **Contact: Christopher Jordan, AICP** **8401 Laguna Palms Way** **Elk Grove, CA 95758**
SUBJECT:	**Environmental Impact Report for Housing Element Update**

In discharging its duties under Section 15021 of the California Environmental Quality Act (CEQA) Guidelines, the City of Elk Grove (as Lead Agency, hereinafter City) intends to prepare an Environmental Impact Report (EIR) for the 2013 Housing Element Update (the Project). In accordance with Section 15082 of the CEQA Guidelines, the City of Elk Grove has prepared this Notice of Preparation (NOP) to provide the Office of Planning and Research, Responsible and Trustee Agencies,

and other interested parties with sufficient information describing the Project and its potential environmental effects.

The determination to prepare an EIR was made by the City following preliminary review of the Project. Probable environmental effects of the Project are described in the full Notice of Preparation, which may be viewed at the City of Elk Grove City Hall, Development Services-Planning, 8401 Laguna Palms Way; or via the internet at http://www.egplanning.org/environmental/.

Project Overview

The proposed project consists of the adoption and implementation of the 2013 Housing Element Update (the Project). The Project has been prepared to ensure the City's ability to accommodate housing needs, including Elk Grove's fair-share of the 2013-2021 Regional Housing Needs Allocation (RHNA). In accordance with State law, the Housing Element contains a housing plan that establishes goals, policies, and actions to address the City's housing needs. These policies and actions ensure adequate sites to accommodate housing needs, as well as provide incentives for production of affordable and special-needs housing and reduce barriers to the production of housing.

The Housing Element includes the following components, consistent with the requirement of Government Code Section 65583:

- A review of the previous element's goals, policies, programs, and objectives to ascertain the effectiveness of each of these components, as well as the overall effectiveness of the Housing Element.
- An assessment of housing needs and an inventory of resources and constraints related to the meeting of these needs, including an inventory of sites available to accommodate the RHNA.
- An analysis and program for preserving assisted housing developments.
- A statement of community goals, quantified objectives, and policies relative to the preservation, improvement, and development of housing.
- A program which sets forth a schedule of actions that the City is undertaking or intends to undertake, in implementing the policies set forth in the Housing Element to identify adequate sites to accommodate the housing needs of all economic segments of the community. The program must do all of the following:
- Identify actions that will be taken to make adequate sites available to accommodate the City's share of the regional housing need, if the need could not be accommodated by the existing inventory of residential sites;
- Assist in the development of adequate housing to meet the needs of extremely low, very low, low, and moderate income households;

- Address and, where appropriate, remove governmental constraints to the maintenance, improvement, and development of housing;
- Conserve and improve the condition of the existing affordable housing stock;
- Promote housing opportunities for all persons regardless of race, religion, sex,
- marital status, ancestry, national origin, color, familial status, or disability; and
- Preserve assisted housing developments for lower income households.
- Identify the agencies and officials responsible for implementation of the actions and the means by which consistency will be achieved with other General Plan elements and community goals.
- Include a diligent effort to achieve public participation of all economic segments of the community.

The Housing Element Update focuses on revisions to the adopted Housing Element that are necessary to comply with changes to State law and that are needed to reflect changes that have occurred since adoption of the current Housing Element in 2008. These changes include updated demographic information, updated housing needs data, updated analysis of the availability of housing sites to meet the City's needs, and an updated Housing Program to establish goals, policies, and actions to address the City's housing needs. The Housing Element map of available housing sites will be updated to identify adequate sites to accommodate the City's 2013-2021 RHNA, and the City will concurrently amend the General Plan Land Use Map and Zoning Map to accommodate the housing sites. The sites are described in greater detail in the full Notice of Preparation referenced above.

Public Comment Opportunity

As specified by the CEQA Guidelines, the Notice of Preparation shall be circulated for a 30-day review period. **The comment period runs from Friday, August 2, 2013 to Monday, September 2, 2013.** The City welcomes public input during this review. In the event that no response or request for additional time is received by any responsible agency by the end of the review period, the Lead Agency may presume that the responsible agency has no response [CEQA Guidelines Section 15082(b(2)].

Comments may be submitted in person at the Scoping Meeting or in writing during the review period and addressed to:

City of Elk Grove
Planning Department
c/o Sarah Bontrager, Housing Program Manager
8401 Laguna Palms Way
Elk Grove, CA 95758

A Scoping Meeting will be held on August 15, 2013 at 10 A.M. in the City of Elk Grove Council Chambers, located at 8400 Laguna Palms Way, Elk Grove, CA.

Sandy Kyles
Planning Specialist

City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

916.478.3620 (desk)
916.691.3175 (fax)
Skyles@elkgrovecity.org

www.elkgrovecity.org

<Elk Grove_HousingElement_NOP_August_2013_Publication Notice.pdf>

By sending us an email (electronic mail message) or filling out a web form, you are sending us personal information (i.e. your name, address, email address or other information). We store this information in order to respond to or process your request or otherwise resolve the subject matter of your submission.

Certain information that you provide us is subject to disclosure under the California Public Records Act or other legal requirements. This means that if it is specifically requested by a member of the public, we are required to provide the information to the person requesting it. We may share personally identifying information with other City of Elk Grove departments or agencies in order to respond to your request. In some circumstances we also may be required by law to disclose information in accordance with the California Public Records Act or other legal requirements.

STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013
(213) 576-7083

August 27, 2013

Sarah Bontrager
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

Dear Ms. Bontrager:

Re: SCH 2013082012 Housing Element Update NOP

The California Public Utilities Commission (Commission) has jurisdiction over the safety of highway-rail crossings (crossings) in California. The California Public Utilities Code requires Commission approval for the construction or alteration of crossings and grants the Commission exclusive power on the design, alteration, and closure of crossings in California. The Commission Rail Crossings Engineering Section (RCES) is in receipt of the *Notice of Preparation (NOP)* for the proposed City of Elk Grove (City) Housing Element Update project.

The project area includes active railroad tracks. RCES recommends that the City add language to the Housing Element Update so that any future development adjacent to or near the railroad/light rail right-of-way (ROW) is planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade crossings. This includes considering pedestrian circulation patterns or destinations with respect to railroad ROW and compliance with the Americans with Disabilities Act. Mitigation measures to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade crossings due to increase in traffic volumes and continuous vandal resistant fencing or other appropriate barriers to limit the access of trespassers onto the railroad ROW.

If you have any questions in this matter, please contact me at (213) 576-7076, ykc@cpuc.ca.gov.

Sincerely,

Ken Chiang, P.E.
Utilities Engineer
Rail Crossings Engineering Section
Safety and Enforcement Division

C: State Clearinghouse

Danny Victor <dannyviking@gmail.com> August 6, 2013 10:19 AM
To: Sandy Kyles <skyles@elkgrovecity.org>
Section 8 housing in my neighborhood

The impact on the environment would be devastating. Statistics prove low income housing produces higher activity of crime and devalues the neighborhood in the surrounding area. Is the city prepared to reimburse the loss of my home value if it proceeds with this project? Are they prepared to act as a co-conspiritor when crime rates increase by reason of the foreknowledge of evidence it is aware of? I have a better idea, why don't you place the project in your neighborhood.

LAW OFFICES OF
GREGORY D. THATCH
1730 I Street, Suite 220
SACRAMENTO, CA 95811-3017
Telephone (916) 443-6956
Facsimile (916) 443-4632
www.thatchlaw.com

GREGORY D. THATCH
LARRY C. LARSEN
MICHAEL DEVEREAUX
RYAN M. HOOPER

WASHINGTON, DC OFFICE
1225 I Street, Suite 250
WASHINGTON, DC 20005-3914
Telephone 202-289-30[illegible]
Facsimile 202-289-8683

August 30, 2013

VIA U.S. MAIL AND ELECTRONIC MAIL

Sarah Bontrager
Housing Program Manager
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

Re: Environmental Impact Report for the Housing Element Update

Dear Ms. Bontrager:

As you know, this office represents Sheldon Farms. We have reviewed the Notice of Preparation ("NOP") associated with the Environmental Impact Report ("EIR") for the Housing Element update and write in order to offer the following comments.

We have had many discussions with Planning Staff concerning the Housing Element update as it relates to the Sheldon Farms property and General Plan Land Use Element Policy LU-40, which requires the inclusion of 10-15 acres of high density residential development on the Sheldon Farms property at such time that a land plan is proposed by the landowner and approved by the City.

Table 2: Sites Proposed For General Plan Land Use And Zoning Changes on page 7 of the Housing Element NOP provides that the Sheldon Farms property is being analyzed for a full 15 acres of high density residential development, rather than a range of between 10-15 acres, consistent with LU-40. This is problematic because it is important that the EIR analyze a range of acreage devoted to high density residential development on the Sheldon Farms property in order to establish the proportionate level of impacts that correspond to the amount of acreage planned for high density residential development.

We appreciate that it can be tempting to only study the full 15 acres of high density residential development associated with the Sheldon Farms property and simply assume that there would be less impact in the event that less high density housing were ultimately proposed for the Sheldon Farms property. However, as explained in *CEQA Guideline* §15121 (a), an EIR is an informational document that will inform public agency decision makers and the public of the significant environmental effects of a project. Thus, if the lower end of the range is not also analyzed, the decision makers will not know the degree to which the development of lesser acreage of high density housing would decrease environmental impacts.

Consequently, we request that the Housing Element update EIR analyze the potential impacts associated with a range of between 10-15 acres of high density residential development on the Sheldon Farms property.

We appreciate your consideration of our request. Should you have any questions, please do not hesitate to contact our office.

Very truly yours,

LAW OFFICES OF
GREGORY D. THATCH

RYAN M. HOOPER

RMH/hb
H0357.docx

cc: Members of the City of Elk Grove Planning Commission
Taro Echiburu, City of Elk Grove
Carl Stein, Sheldon Farms

Sindy M. Cesarini

From: Viv Hao <vivhao79@hotmail.com>
Sent: Monday, September 02, 2013 12:13 PM
To: Sandy Kyles; Frank Maita; George Murphey; Nancy Chaires; Fedolia Harris; Brian Villanueva; Sarah Bontrager
Subject: Comment in Environment Impact To Stone Lake Due To Rezoning From an Original Resident

Dear All,

I am one of the original residents of Stone Lake Master planned community.

When this community was planned, great thought was put into how to create a viable, energetic community in what was a desolate part of Elk Grove. The master plan went back and forth between the builder and Sacramento county and one of the last items that stated must be added was retail (currently sites C10 and C26) in your zoning lingo. Additional retail was planned for C27 and C31.

Fast forward 10+ years and great progress has been made. The local school is excellent but at over capacity, the parks are beautiful, but the retail is still lacking. The Stone Lake landing complex (opposite the road to C10 and C26) is an upmarket complex with just a few stores operational. Kinetic bikes sells high end bikes, a soon to arrive Korean BBQ restaurant (http://ozkoreanbbq.com/Location.html) and other stores. But the vast majority of stores remain vacant. What is needed to complete the master plan is not high density housing, we need to keep C10, C26, C27 and C31 as retail so the vision of the master plan can be realized.

So please don't mess up the master plan vision by rezoning C10, C26, C27 and C31 as high density housing. There are already several large apartment complexes in the area and the west side of elk grove doesn't need more apartments. It needs more retail. More retail to create a critical mass so that the current residents don't have to drive way across town to Bruceville road but can instead walk, bike to local stores as originally envisioned.

Thank you for your attention.

Sindy M. Cesarini

From:	Winnie <winnnnnnnn@yahoo.com>
Sent:	Monday, September 02, 2013 10:15 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	EIR for high density housing in Stonelake area
Importance:	Low

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davisgdavis@elkgrovecity.org
Vice Mayor Steven Detricksdetrick@elkgrovecity.org
Council Member James Cooperjcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an additional share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units =**23%** of the Stonelake housing stock!

The need for more high-density housing arises because of growth and development in *other areas* of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply unfair and quite possibly illegal, violating the state statute that requires an even distribution if such housing.

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles each way to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

There are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:
Winnnnnnnn@yahoo.com

Thank you for including these comments in the record of administrative proceedings for this matter.

Winnie Tsang

Save paper... Think before you print.

Sindy M. Cesarini

From: Amar Shergill <amar@shergilllawfirm.com>
Sent: Tuesday, September 03, 2013 9:49 AM
To: Sarah Bontrager
Cc: Gary Davis; Steve Detrick; James Cooper
Subject: EIR for Stonelake Rezoning

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

The City of Elk Grove made a promise to me and to my neighbors. The Stonelake community was built under a Specific Plan. High density housing, commercial properties, parks and schools were all designated in accordance with best practices. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. More high-density housing is now being considered in our neighborhood because of mismanaged growth and development in other areas of the city. Altering the Stonelake plan via rezoning would be a fundamental breach of trust to the families that have invested in these neighborhoods. I expect the City to keep its promises.

Sincerely,
Amar Shergill

Shergill Law Firm | Sacramento | San Francisco | Yuba City
2150 River Plaza Drive, Suite 295, Sacramento, CA, 95833 | 916 564 5781 | www.shergilllawfirm.com

Sindy M. Cesarini

From:	psidhu99 <psidhu99@yahoo.com>
Sent:	Tuesday, September 03, 2013 8:04 AM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper; mrssidhu@yahoo.com
Subject:	EIR Response - Stonelake

To: City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc: Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an additional share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

Unfair Distribution of High Density Housing

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and 432 apartments, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = 23% of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was to improve its inventory of high-density housing by capturing that apartment complex.

The need for more high-density housing arises because of growth and development in other areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply UNFAIR.

School Impacts

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. This year, children as young as 6 years old are being bused to other schools due to overcrowding. Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

Traffic Impacts

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

Overburden on Stonelake Park and Recreation Facilities

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

Worsens Elk Grove's Existing Jobs/Housing Imbalance

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only breaks the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an additional, unfair share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address.

Thank you for including these comments in the record of administrative proceedings for this matter.

Sincerely,

Paul & Harpreet Sidhu
Stonelake Residents

2724 West Pintial Way
Elk Grove, CA 95757
(916) 714-5987
Psidhu99@yahoo.com

Sindy M. Cesarini

From: Toni <toni2003@comcast.net>
Sent: Tuesday, September 03, 2013 4:37 AM
To: Sarah Bontrager
Cc: Gary Davis; Steve Detrick; James Cooper
Subject: environmental impact report

City of Elk Grove
Planning Department
Sarah Bontrager

Dear Ms. Bontrager,

This email is in response to the Environmental Impact Report that is to be made. I am concerned with the potential of rezoning lots in the Stonelake area. I live in the Heritage Lakeside Development, (55 and older) and I believe that if adding high-density housing to this area will have a detrimental effect on our community and the surrounding communities.

We already have a fair share of high density housing, specifically the apartments on Harbour Pointe, Taron, Four Winds, and three in the Renwick area. I am not sure of the total number of units, but with that many high density housing, there has to be close to 2000 units (or many more).

Besides the impact that this would make on the surrounding communities, it will also make an impact on schools. Our schools are already overloaded with crowded classrooms. Transportation is another problem. In my opinion, we have very poor public transportation in this area, thus encouraging more and more privately owned vehicles in and out of the area.

While we have beautiful parks and recreational facilities in the area, we will be burdened with overcrowding of the parks with additional high density housing. Already the parks are crowded on weekends and holidays. What we really need is additional parks for the residents already here to enjoy.

I am opposed to re-zoning in Stonelake area unless the city is prepared to make drastic changes in the area such as providing adequate public transportation, more parks and recreational areas (such as in Elk Grove Park), additional schools with adequate number of teachers for classrooms.

Please include me on the list of persons to be notified of the proceedings and voting results for the City's proposed update for its Housing Element. I can be reached at the following address: Toni2003@comcast.net

Thank you for including these comments in the record of administrative proceedings for this matter.

Antoinette Hannahs
9437 Century Oaks Lane
Elk Grove CA 95758

Sindy M. Cesarini

From: Hank Gallegus <hgallegus@hotmail.com>
Sent: Monday, September 02, 2013 8:04 PM
To: Sarah Bontrager
Cc: Gary Davis; Steve Detrick; James Cooper
Subject: FW: Low Income Housing Update - Comment Deadline Tomorrow

---

Date: Mon, 2 Sep 2013 15:33:31 -0700
Subject: Low Income Housing Update - Comment Deadline Tomorrow
From: stonelakecitizens@gmail.com
To: markfbuckman@sbcglobal.net

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex**.

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR.**

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The

addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

Sindy M. Cesarini

From:	julioli8882012@gmail.com on behalf of JULIO LI <julioli@gmail.com>
Sent:	Monday, September 02, 2013 4:54 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	Fwd: Low Income Housing Update - Comment Deadline Tomorrow

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex.**

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR.**

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent

to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

Sindy M. Cesarini

From: Robert Mar <robmar2000@gmail.com>
Sent: Monday, September 02, 2013 7:46 PM
To: Sarah Bontrager
Subject: gdavis@elkgrovecity.org, sdetrick@elkgrovecity.org, jcooper@elkgrovecity.org

Dear Ms. Bontrager,

As a Stonelake resident of 4 years, I am strongly opposed to the possibility of the City of Elk Grove rezoning lots C-10, C-26, C-27, and C-31 in the Stonelake area for the purpose of creating high-density housing. I believe that the quality of life in our Stonelake community would be adversly impacted if additional high-density housing were to be created. Please take into consideration the points made in the letter below.

Thank you,

-Robert Mar

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex**.

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Thank you for including these comments in the record of administrative proceedings for this matter.

Sindy M. Cesarini

From: Ernie Stewart <LtEStew@aol.com>
Sent: Monday, September 02, 2013 4:34 PM
To: Sarah Bontrager; James Cooper
Subject: High Density Housing

Importance: Low

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davisgdavis@elkgrovecity.org
Vice Mayor Steven Detricksdetrick@elkgrovecity.org
Council Member James Cooperjcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units =**23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex.**

The need for more high-density housing arises because of growth and development in *other*areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR.**

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," *which is* "designed to foster low intensity neighborhood-oriented commercial development adjacent to,integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

Sent from my iPhone

Sindy M. Cesarini

From: Jeremiah McNeil <jeremiahmcneil@gmail.com>
Sent: Monday, September 02, 2013 4:23 PM
To: Sarah Bontrager
Cc: Gary Davis; Steve Detrick; James Cooper
Subject: High Density Housing

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an additional share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- Unfair Distribution of High Density Housing

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and 432 apartments, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = 23% of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was to improve its inventory of high-density housing by capturing that apartment complex.

The need for more high-density housing arises because of growth and development in other areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply UNFAIR.

- School Impacts

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. This year, children as young as 6 years old are being bused to other schools due to overcrowding. Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an

additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- Traffic Impacts

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- Overburdens Stonelake's Park and Recreation Facilities

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- Worsens Elk Grove's Existing Jobs/Housing Imbalance

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only breaks the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an additional, unfair share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

Sincerely,
Jeremiah McNeil
9837 Bobbell Dr.
Elk Grove, CA 95757
916-705-1134

Sindy M. Cesarini

From: misantiago@comcast.net
Sent: Monday, September 02, 2013 3:53 PM
To: Sarah Bontrager
Cc: Steve Detrick; James Cooper; Gary Davis
Subject: High Density Housing Stonelake

Dear Ms. Bontrager,

As a ten year plus Stonelake resident I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an additional share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- Unfair Distribution of High Density Housing

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and 432 apartments, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = 23% of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was to improve its inventory of high-density housing by capturing that apartment complex.

The need for more high-density housing arises because of growth and development in other areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share *allocation* for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply UNFAIR.

- School Impacts

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. This year, children as young as 6 years old are being bused to other schools due to overcrowding. Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the

commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- Traffic Impacts

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- Overburdens Stonelake's Park and Recreation Facilities

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- Worsens Elk Grove's Existing Jobs/Housing Imbalance

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only breaks the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an additional, unfair share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

Sincerely,

Marilyn Santiago
10053 East Taron Drive
Elk Grove, CA 95757
Sent from Xfinity mobile App

Sindy M. Cesarini

From:	jeanie@esiseminars.com
Sent:	Monday, September 02, 2013 5:15 PM
To:	Sarah Bontrager
Cc:	Gary Davis
Subject:	High Density Housing

I am writing to you to address the potential environmental impacts that would result if the City were to rezone lots in the Stonlake area (lots c-10, C-26, C-27 and C-31.

1) It is unfair to add more high density housing to an area that already has its fair share of high density housing. The specific plan that authorized development of Stonelake included 1.467 single family residential units and 432 apartments which was Stonelakes calculated fair share of high density housing

2)School Impact- At this time our schools house over 1,000 students in a school that was built to house 600. So now w are busing children as young a 6 years of age to other school. This is not right. Any new high density housing should be built near schools that can accommodate those new students.

3) Traffic Impact- Our streets are over crowded now due to parents and buses trying to get the children bussed to school. Adding more to that would be unsafe and make Stonelake and Elk Grove an unattractive and inconvenient place to live.

4)Worsens Elk Groves Existing Jobs/Housing Imbalance- Elk Grove is a bedroom community and as such most of us commute to other communities, adding more housing to this already overburdened freeway and surface streets would create more jobs seekers and more freeway/surface street traffic and worsen Elk Groves existing Job/Housing Imbalance.

For these reasons, new high density development should occur where the City can plan to include adequate schools, parks, streets, jobs and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an additional unfair share of high density housing, it must undertake an EIR and analyze all of the environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of people to be notified of the proceedings for the City"s proposed update for its Housing Element. I can be reached at the following address: 9628 Nature Trail Way Elk Grove, Ca. 95757

Thank you for including these comments in the record of administrative proceedings for this matter.

Jeanie Kunz

Sindy M. Cesarini

From: jeanne li <jeanneongli@gmail.com>
Sent: Monday, September 02, 2013 6:18 PM
To: Gary Davis; Steve Detrick; James Cooper; Sarah Bontrager
Subject: Low Income comments

Dear: Sarah Bontrager
Mayor Gary Davis
Vice Mayor Steven Detrick
Council Member James Cooper

I am writing to all of you today in regards to the Low Income Housing being proposed for Stonelake. As a previous board member of Stonelake, I always look at every angle. Sometimes the community does not like what I have to say or agree to. However having looked at all the angels of this proposal, I am not a fan of having low income housing in my community. This is not the place for it. I sympathize with folks on low income, but having it close to Stonelake would just make Stonelake undesirable. We have one of the best neighborhoods in Elk Grove. Our neighbor just had to move due to the house they were renting. The neighbors said they were sad to move out of our community because it is peaceful and beautiful. Not saying low income housing would make it ugly, but we all know what happens when low income housing gets built.

Please look at other areas.

Sincerely,

Jeanne Li

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the

following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex.**

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it

impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional*, *unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

Sindy M. Cesarini

From:	gustavantwi@comcast.net
Sent:	Monday, September 02, 2013 8:32 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	RE: Stonelake Area Environmental Impact

Dear Ms. Bontrager,

I am a concern citizen of the Stonelake community, and responding to the Elk Grove City Council's Notice of Preparation of an Environmental Impact Report for the updating its housing profile. I am pleading to the City not to rezoning the lots C-10, C26, C27, and C-37, which will let the community to accept an additional share of high-density housing to introducing another apartment housing units to the Stonelake are at.

Stonelake has already fulfilled its fair-share of the high-density housing after the 432 apartments was built along the East Taron Drive. This additional low income housing apartments shall cause more issues which many homeowners are still managing such as traffic impacts, decline in the property values, school impacts, overburdens parks and the club house facilities.

Due to overcrowding at Elliot Ranch Elementary School, one of my three children was sent to Elizabeth Pinkerton Middle School instead of Toby Johnson Middle School. The Elk Grove Unified School District do not provide transportation to most of the students in this community, therefore many parents drive this extra 4 miles every morning busing their children to school before going to work along with the traffic impact on Elk Grove Blvd from 6:30 am to 9:00 am Monday to Friday.

The club house and its facilities were designed and built per the specifications approved for the community for the 1,467 single family units and the additional 432 apartments and cannot accommodate additional housing units or apartments.

Based on the above mentioned impacts already experienced at the Stonelake area, the community cannot accommodate additional share of high housing impact again.
The City should consider these impacts and redirect the need for the low income housing units to where adequate schools and streets, parks, and transportation can be accommodated.

I can be reached at 916-613-3914.

Gustav Antwi
9640 Nature Trail Way
Elk Grove, CA 95757.

Sindy M. Cesarini

From: Doug Lee <doughlee65@yahoo.com>
Sent: Monday, September 02, 2013 11:26 AM
To: Sandy Kyles; Sarah Bontrager
Cc: BMacNeil@egusd.net; Gary Davis; James Cooper; Frank Maita; George Murphey; Nancy Chaires; Fedolia Harris; Brian Villanueva
Subject: Stone lake Community Comment/Concerns on EIR High Density Housing

Dear Members of the Planning Commision, Mayor and Representative Cooper,

I understand that several commercially zoned properties in the Stone Lake master planned community and directly opposite it are being considered for conversion to high density housing.

I am astounded that this is even being consider.

The local school (Elliott Ranch) is already at capacity with children being bused to adjacent schools due to the school being impacted. What will happen to these additional children in these 250 apartments? Where will they go to school? I've CC'ed the local principal since this is a real issue and concern.

The west side of Elk Grove and especially Stone Lake already has significant numbers of apartments as was part of the master planned community. Furthermore, those apartments were balanced by the inclusion of retail in the master plan which is now being converted into even more apartments. If the zones C26 and C10 are converted to high density 25 housing this will mean an additional 250+ apartments to the already 400 apartments in Stone Lake apartments but there are only 1400 homes.

Finally your own guidelines state that high density housing should be in areas with public transportation and jobs. The area of Stone Lake has neither. The local bus services operates very infrequently and there is no retail to speak of and never will be if these lots are rezoned as high density housing.

Sincerely,

Doug

Sindy M. Cesarini

From:	Mark F. Buckman <markfbuckman@sbcglobal.net>
Sent:	Monday, September 02, 2013 3:38 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	Stonelake - Unfair Impacts of the Housing Element Update

City of Elk Grove
Planning Department
Sarah Bontrager

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex**.

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and

planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

Sincerely,

Mark F. Buckman

Sindy M. Cesarini

From:	Randy C <randycsacto@gmail.com>
Sent:	Monday, September 02, 2013 4:25 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	Stonelake Rezoning - Comments regarding the scope of the environmental impact report

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element.

Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component.

Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community.

The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.

432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex**.

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule.

As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time.

Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.**

Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available.

Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks.

Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day.

Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

RandyCSacto@gmail.com

Thank you for including these comments in the record of administrative proceedings for this matter.

Randy Chinn
RandyCSacto@gmail.com

Sindy M. Cesarini

From: Noelle MacLennan <noellemac@comcast.net>
Sent: Monday, September 02, 2013 9:30 PM
To: Sarah Bontrager
Cc: Gary Davis; Steve Detrick; James Cooper
Subject: Unfair Distribution of High Density Housing

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional***share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex**.

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR.**

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

A concerned citizen of Stonelake,
Noelle MacLennan

Sindy M. Cesarini

From:	Derek Ramsey <ramseyderek@gmail.com>
Sent:	Tuesday, September 03, 2013 11:17 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	EIR for Stonelake area Lots C-10, C-26, C-27 and C-31

TEXT OF THE LETTER BELOW:

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component.

When we purchased our home in Stonelake we understood it was part of a master planned community and the vacant lot(s) were zoned for commercial use. We didn't have a problem with that hence we bought our house. If we knew these lots were to be used for more high density housing, we would've never purchased our house and would have looked elsewhere. What is the purpose for a master planned community if the planning aspect changes after the master planning? I can't understand why more high density housing would be added to this area of Elk Grove when it already doesn't have the capacity to house the kids that wish to attend Elliott Ranch. Kids are currently being bused out to other schools because they can't attend the school literally in their backyard. This is a travesty! Why would anyone consider to put more housing in the area when it's clear it can't support what is already in place? Clearly there has to be better places within Elk Grove that can accept more residence and has the infrastructure in place to support it.

Below are more items which speak to this area being unfavorable for high density housing and should be considered during environmental impacts. These items would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex.**

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR.**

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to,integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address: 3301 E. Pintail Way, Elk Grove, CA 95757

Thank you for including these comments in the record of administrative proceedings for this matter.

Sincerely,

Derek and Stephanie Ramsey

Sindy M. Cesarini

From:	Roschewski, Carol <Carol.Roschewski@nustarenergy.com>
Sent:	Tuesday, September 03, 2013 1:40 PM
To:	Sarah Bontrager
Cc:	Gary Davis; 'detrick@elkgrovecity.org'; James Cooper
Subject:	High Density Housing Update - Comment Deadline 9/4/13

I am sending this email as a resident of Stonelake. The views in this letter do not represent my employer Nustar.

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex**.

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

Sindy M. Cesarini

From: Brenda Ross <bross@newstraktv.com>
Sent: Wednesday, September 04, 2013 12:22 AM
To: Sarah Bontrager
Cc: Gary Davis; Steve Detrick; James Cooper
Subject: Elk Grove High Density Housing issue

Dear Ms Bontrager,

I'm writing today to voice my concern over the proposal of high-density housing being located in the Stonelake development area. No doubt you are aware of the low income housing already placed in our area; adding another would a bit unfair to homeowners who have a home in the Stonelake area seeing how this area has taken on two housing projects

Please consider another location for the 432 apartments that are being planned for Elk Grove. One major point to consider in this whole thing is the fact that there are very few jobs to be had in this area. Homeowners would have to ride a bus to their their job Unless our economy changes quite quickly, all these people would have to travel to get to their place of work.

I realize most everyone in Elk Grove does not want to have these units next door to them. They tend to invite crime, lower property values and more. But we are destined to have them. So beit. But, let's spread this responsibility and let everyone carry a bit of the burden.

Thank you for considering.

Sincerely,

Brenda Ross
Stonelake resident

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

3109 Tree Swallow Circle
Elk Grove, CA 95757

Thank you for including these comments in the record of administrative proceedings for this matter.

Carol Roschewski

Sindy M. Cesarini

From:	Kathy Engle <kat.engle@comcast.net>
Sent:	Tuesday, September 03, 2013 12:35 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	High Density Housing

City of Elk Grove
Planning Department
Sarah Bontrager

Cc: Mayor Gary Davis
Vice Mayor Steven Detrick
Council Member James Cooper

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex**.

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional*, *unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

Katherine Engle

Sent from my iPad

Sindy M. Cesarini

From:	Tricia Wu Borges <twuborges@yahoo.com>
Sent:	Tuesday, September 03, 2013 3:14 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	High-Density Development in Stonelake

Dear Ms. Bontrager,
I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

• **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%**of the Stonelake housing stock!
Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex**.
The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.
Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved. Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

• **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" –i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.
As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

• **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

• **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

• **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial,"which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Tricia Wu Borges
9976 West Taron Drive
Elk Grove, CA 95757

Thank you for including these comments in the record of administrative proceedings for this matter.

Sincerely,

Tricia Wu Borges
From
[Tricia Wu Borges V]
To

-

Add TO Recipients CC BCC
CC

- [ ]

Add CC Recipients Hide CC BCC
BCC

- [ ]

Add BCC Recipients Hide BCC
Subject
[ ]**Uploader options...**
*Select a font Select a font size BoldItalicUnderlineText colorText highlight color List List Indent Indent Flush Left Centered Flush RightLink Emoticons StationeryCheck spelling***Select Language** *Switch to Rich Text Switch to Plain Text*

- 0 Attachments
- 0B
-
-
- 0B
- Remove All

Message Body
Minimize
Close

-
- 0

Sindy M. Cesarini

From:	Su Takhar <takhar3@yahoo.com>
Sent:	Tuesday, September 03, 2013 8:49 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	Low Income Housing

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's **Notice of Preparation of an Environmental Impact Report for the update** to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's **EIR must analyze the following significant environmental impacts** that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's **432 apartment complex is one of the largest and one of the highest densities in the City.** When the City annexed the Stonelake area, we understand one of its stated reasons was ***to improve its inventory of high-density housing by capturing that apartment complex.***

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR.**

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to,

integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

Sindy M. Cesarini

From:	Kiran Sandhu <gksandhu99@gmail.com>
Sent:	Tuesday, September 03, 2013 8:53 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	Low Income Housing

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex.**

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to,

integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

Thank you for including these comments in the record of administrative proceedings for this matter.

Sindy M. Cesarini

From:	Bertolucci, Ana <Ana.Bertolucci@nustarenergy.com>
Sent:	Tuesday, September 03, 2013 1:14 PM
To:	Sarah Bontrager; Gary Davis; Steve Detrick; James Cooper
Subject:	Opposition to more high-density housing in Stonelake

This email is being sent from Ana Bertolucci as a resident of Stonelake in Elk Grove and does not represent the views of my employer, NuStar. For some reason I am having trouble sending it from my own personal email account so am having to use my work email account.

.....

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

September 3, 2013

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex.**

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

9825 Bobbell Drive
Elk Grove, CA 95757

Thank you for including these comments in the record of administrative proceedings for this matter.

Sincerely,

Ana Bertolucci and Gord Pedlar

Sindy M. Cesarini

From:	Susan Hopkins <susihop@frontiernet.net>
Sent:	Tuesday, September 03, 2013 1:32 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	Proposed additional low income housing in Stonelake

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org
cc Mayor Gary Davis gdavis@elkgrovecity.org
Vice Mayor Steven Detrick sdetrick@elkgrovecity.org
Council Member James Cooper jcooper@elkgrovecity.org

Dear Ms. Bontrager,
I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

• **Unfair Distribution of High Density Housing**
Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex**.

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.
Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved. Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

• **School Impacts**
Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – I.e., bussed – to other school sites because the school is over capacity. **This year, children as**

young as 6 years old are being bused to other schools due to overcrowding. Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.
As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

• **Traffic Impacts**
Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

• **Overburdens Stonelake's Park and Recreation Facilities**
Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

• **Worsens Elk Grove's Existing Jobs/Housing Imbalance**
Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address: **susihop@frontiernet.net**

Thank you for including these comments in the record of administrative proceedings for this matter.

Susan Hopkins
Elk Grove, CA

Sindy M. Cesarini

From:	John Holzman <bayareasw@comcast.net>
Sent:	Tuesday, September 03, 2013 5:10 PM
To:	Sarah Bontrager
Cc:	Gary Davis; Steve Detrick; James Cooper
Subject:	Stonelake high-denisty housing

City of Elk Grove
Planning Department
Sarah Bontrager
Sbontrager@elkgrovecity.org

Dear Ms. Bontrager,

I am writing in response to the City's Notice of Preparation of an Environmental Impact Report for the update to its housing element. Specifically, I am concerned about the potential environmental impacts that would result if the City were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not included the required high-density housing component. Among other things, the City's EIR must analyze the following significant environmental impacts that would result if the City rezoned lots in Stonelake:

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = **23%** of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was **to improve its inventory of high-density housing by capturing that apartment complex**.

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply **UNFAIR**.

- **School Impacts**

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a

traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

- **Traffic Impacts**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only *breaks* the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Before the City can rezone any lots in Stonelake for an *additional, unfair* share of high-density housing, it must undertake an EIR and analyze all of these environmental impacts, as well as any other potentially significant impacts that would result from its decision.

Please include me on the list of persons to be notified of the proceedings for the City's proposed update for its Housing Element. I can be reached at the following address:

John Holzman
9637 Nature Trail Way
Elk Grove, CA 95757

916/685-2863
bayareasw@comcast.net

Thank you for including these comments in the record of administrative proceedings for this matter.

Cordially,

John Holzman

Gmail by Google

Beth Thompson <bthompson@denovoplanning.com>

FW: Opposed to the Housing Element Changes

1 message

Sandy Kyles <skyles@elkgrovecity.org> Tue, Aug 27, 2013 at 8:59 AM
To: Sarah Bontrager <sbontrager@elkgrovecity.org>, "bthompson@denovoplanning.com" <bthompson@denovoplanning.com>

Sandy

From: julioli8882012@gmail.com [mailto:julioli8882012@gmail.com] On Behalf Of JULIO LI
Sent: Monday, August 26, 2013 9:03 PM
To: Sandy Kyles
Subject: Opposed to the Housing Element Changes

To:

City of Elk Grove

Planning Department

c/o Sarah Bontrager, Housing Program Manager

8401 Laguna Palms Way

Elk Grove, CA 95758

Dear City Planning Department:

I am opposed to the proposed changes to allow building more apartments for low to very low income housing.

Building that many units will upset the balance of the area near I-5 and Elk Grove Blvd. For example our schools are already full, and I hear of many families who live in the immediate area to Stonelake and Elliott Ranch schools, that have to send their kids to other areas. Our schools will be impacted negatively with the addition of more and more families with kids.

Presently the area near I-5 has the lowest crime rates in the city. It is an a very attractive area. Public transit does not serve this area with frequency. Crime rates will increase.

This is a very bad idea. Affecting adversely both the environment, and the quality of life.

Please do not approve the Housing Element changes.

Sincerely,

A concerned citizen

Julio Li

---

winmail.dat
12K

Gmail by Google

Beth Thompson <bthompson@denovoplanning.com>

FW: SCH 2013082012 Elk Grove Housing Element Update NOP, August 27, 2013

1 message

Sarah Bontrager <sbontrager@elkgrovecity.org> Tue, Aug 27, 2013 at 12:54 PM
To: Beth Thompson <bthompson@denovoplanning.com>

FYI

From: Chiang, Yen K. [mailto:yen.chiang@cpuc.ca.gov]
Sent: Tuesday, August 27, 2013 10:31 AM
To: Sarah Bontrager
Cc: Wong, Leo; Munoz, Rosa; state.clearinghouse@opr.ca.gov; Stewart, David R.
Subject: SCH 2013082012 Elk Grove Housing Element Update NOP, August 27, 2013

Hi, Sarah @ (916) 627-3209:

Attached is a CPUC comment letter on the subject project.

If you have questions on the letter, pls contact me for discussions.

Thanks for the opportunity to provide comments on the project.

(Yen) Ken Chiang, P.E.

Utilities Engineer

Rail Crossings Engineering Section

California Public Utilities Commission

320 West 4th Street, Suite 500

Los Angeles, CA 90013

(213) 576-7076//FAX: 576-7029

CPUC Rail Crossings Engineering Section

http://www.cpuc.ca.gov/crossings/

SCH 2013082012 Elk Grove Housing Element Update NOP August 27, 2013.pdf
33K

Gmail by Google

Beth Thompson <bthompson@denovoplanning.com>

FW: Action Needed Today For High Density Housing Rezoning in StoneLake

1 message

Sarah Bontrager <sbontrager@elkgrovecity.org> Fri, Aug 30, 2013 at 1:23 PM
To: Beth Thompson <bthompson@denovoplanning.com>

For the EIR.

From: jeanfung@frontiernet.net [mailto:jeanfung@frontiernet.net]
Sent: Friday, August 30, 2013 1:15 PM
To: Sandy Kyles; Sarah Bontrager
Cc: Gary Davis; Frank Maita; George Murphey; Nancy Chaires; Fedolia Harris; Brian Villanueva
Subject: Fw: Action Needed Today For High Density Housing Rezoning in StoneLake

Dear Elk Grove Officials:

I agree with the letter below, opposing high density housing near Stonelake. We already have more than our fair share of apartments.

Please site the apartments somewhere else!

Sincerely,

Jean Fung

3220 E. Pintail Way, EG 95757

To: skyles@elkgrovecity.org; sbontrager@elkgrovecity.org
CC: gdavis@elkgrovecity.org; fmaita@elkgrovecity.org; gmurphey@elkgrovecity.org; nchaires@elkgrovecity.org; fharris@elkgrovecity.org; bvillanueva@elkgrovecity.org
Subject: Regarding Notice of Preparation of an EIR for the Housing Element
Date: Mon, 12 Aug 2013 04:43:57 +0000

Dear Ms Sarah Bontrager,

Please confirm receipt of this email.

I wish to express my concerns at the proposed rezoning to high density housing of lots C-10, C-26, C-27, and C-31 in and directly opposite the **Stonelake neighborhood.** Rezoning these to high density will add over 500 apartments to our small community of only 1400 homes which will have a dramatic effect on its character and the vision of the master planned community approved by Sacramento County.

While we understand affordable housing is required as part of the Housing Element plan we believe it should not be on those lots for the following reasons.

a) Stonelake already has its fair share of high density homes within 1/2 mile (over 600+ apartment homes in the StoneLake Apartments and Somerfield Apartments alone). Adding more high density housing to the Stone Lake neighborhood will make the area unbalanced in terms of housing type composition. Recall we only have 1400 homes in our community.

b) **The local elementary school zoned to Stonelake (Elliot Ranch) is already heavily impacted.** Putting more homes within these school boundaries will only exacerbate the problem. Just this year 17 first graders' (six year olds) who live within the school boundaries had to be bused out to neighboring schools.

c) The Master Planned Community Approved by Sacramento County Before Annexation is a Well Thought Out and Balanced Allocation of Residential and Commercial Uses.

Zones C10 and C26 are zoned Limited Commercial (LC). The limited commercial district is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods". This is a perfect zoning for these properties given the lack of retail businesses on the west side of Elk Grove. Currently most homeowners drive to east of Bruceville road for most commercial transactions.

d) The city has recommended these lots be zoned RD-25. This is completely incompatible with the city's own planning ethos.

The RD-25 district allows the maximum residential density permitted in the City, thirty (25) dwelling units per acre and as much as three stories tall. The City encourages the location of RD-25 sites near commercial or office centers or near light industrial uses or other centers of employment. The west side of Elk Grove has sparse commercial/office centers and is not near any centers of employment of significance or public transportation to such entities.

Thank you for your attention in this matter.

"OCMIZZOU@aol.com" <OCMIZZOU@aol.com> August 6, 2013 5:51 PM
To: Sandy Kyles <skyles@elkgrovecity.org>
Re: Notice of Preparation of an EIR for the Housing Element Update

---

Hello Sandy,

Thank you for sending me this notice. I will try to attend the meeting as I would like to learn more about this process. Actually, I will not say anything, because I got some notoriety from the fact that my email to the City Council was quoted in the local paper. I do NOT want notoriety. I am just concerned that Elk Grove is going to lose its ability to be a healthy middle class community if we get so much low income housing. I understand some cities do not take the federal money. I also feel that someone in city management or on the City Council should have some say as to the type of low income housing which is erected. The buildings on Big Horn and Civic Center are a blight on the city. I have seen low cost housing which is developed in a townhouse manner or a "village" type manner which shows some creativity. I also think having a nice looking place to live is important for the self esteem of the tenants. Just filling the accepted density with unattractive living units says that we are just looking to take the money and are not concerned for those who will live there or around the development.

Again, thank you for sending me the information,
Carol Lambert

In a message dated 8/2/2013 11:28:03 A.M. Pacific Daylight Time, skyles@elkgrovecity.org writes:

NOTICE OF PREPARATION

DATE: **August 2, 2013**

TO: **Office of Planning and Research, Responsible and Trustee Agencies**

LEAD AGENCY: **City of Elk Grove**

Contact: Christopher Jordan, AICP

8401 Laguna Palms Way

Elk Grove, CA 95758

SUBJECT: **Environmental Impact Report for Housing Element Update**

In discharging its duties under Section 15021 of the California Environmental Quality Act (CEQA) Guidelines, the City of Elk Grove (as Lead Agency, hereinafter City) intends to prepare an Environmental Impact Report (EIR) for the 2013 Housing Element Update (the Project). In accordance with Section 15082 of the CEQA Guidelines, the City of Elk Grove has prepared this Notice of Preparation (NOP) to provide the Office of Planning and Research, Responsible and Trustee Agencies, and other interested parties with sufficient information describing the Project and its potential environmental effects.

The determination to prepare an EIR was made by the City following preliminary review of the Project. Probable environmental effects of the Project are described in the full Notice of Preparation, which may be viewed at the City of Elk Grove City Hall, Development Services-Planning, 8401 Laguna Palms Way; or via the internet at http://www.eqplanning.org/environmental/.

Project Overview

The proposed project consists of the adoption and implementation of the 2013 Housing Element Update (the Project). The Project has been prepared to ensure the City's ability to accommodate housing needs, including Elk Grove's fair-share of the 2013-2021 Regional Housing Needs Allocation (RHNA). In accordance with State law, the Housing Element contains a housing plan that establishes goals, policies, and actions to address the City's housing needs. These policies and actions ensure adequate sites to accommodate housing needs, as well as provide incentives for production of affordable and special-needs housing and reduce barriers to the production of housing.

The Housing Element includes the following components, consistent with the requirement of Government Code Section 65583:

A review of the previous element's goals, policies, programs, and objectives to ascertain the effectiveness of each of these components, as well

as the overall effectiveness of the Housing Element.

An assessment of housing needs and an inventory of resources and constraints related to the meeting of these needs, including an inventory of sites available to accommodate the RHNA.

An analysis and program for preserving assisted housing developments.

A statement of community goals, quantified objectives, and policies relative to the preservation, improvement, and development of housing.

A program which sets forth a schedule of actions that the City is undertaking or intends to undertake, in implementing the policies set forth in the Housing Element to identify adequate sites to accommodate the housing needs of all economic segments of the community. The program must do all of the following:

- Identify actions that will be taken to make adequate sites available to accommodate the City's share of the regional housing need, if the need could not be accommodated by the existing inventory of residential sites;
- Assist in the development of adequate housing to meet the needs of extremely low, very low, low, and moderate income households;
- Address and, where appropriate, remove governmental constraints to the maintenance, improvement, and development of housing;
- Conserve and improve the condition of the existing affordable housing stock;
- Promote housing opportunities for all persons regardless of race, religion, sex,

marital status, ancestry, national origin, color, familial status, or disability; and

Preserve assisted housing developments for lower income households.

Identify the agencies and officials responsible for implementation of the actions and the means by which consistency will be achieved with other General Plan elements and community goals.

Include a diligent effort to achieve public participation of all economic segments of the community.

The Housing Element Update focuses on revisions to the adopted Housing Element that are necessary to comply with changes to State law and that are needed to reflect changes that have occurred since adoption of the current Housing Element in 2008. These changes include updated demographic information, updated housing needs data, updated analysis of the availability of housing sites to meet the City's needs, and an updated Housing Program to establish goals, policies, and actions to address the City's housing needs. The Housing Element map of available housing sites will be updated to identify adequate sites to accommodate the City's 2013-2021 RHNA, and the City will concurrently amend the General Plan Land Use Map and Zoning Map to accommodate the housing sites. The sites are described in greater detail in the full Notice of Preparation referenced above.

Public Comment Opportunity

As specified by the CEQA Guidelines, the Notice of Preparation shall be circulated for a 30-day review period. **The comment period runs from Friday, August 2, 2013 to Monday, September 2, 2013.** The City welcomes public input during this review. In the event that no response or request for additional time is received by any responsible agency by the end of the review period, the Lead Agency may presume that the responsible agency has no response [CEQA Guidelines Section 15082(b(2)].

Comments may be submitted in person at the Scoping Meeting or in writing during the review period and addressed to:

City of Elk Grove

Planning Department

c/o Sarah Bontrager, Housing Program Manager

8401 Laguna Palms Way

Elk Grove, CA 95758

A Scoping Meeting will be held on August 15, 2013 at 10 A.M. in the City of Elk Grove Council Chambers, located at 8400 Laguna Palms Way, Elk Grove, CA.

Sandy Kyles

Planning Specialist

City of Elk Grove

8401 Laguna Palms Way

Elk Grove, CA 95758

916.478.3620 (desk)

916.691.3175 (fax)

Skyles@elkgrovecity.org

www.elkgrovecity.org

Jiashu Leo <jiashuleo@yahoo.com> August 5, 2013 9:09 AM
To: rwichert@frontiernet.net , Sandy Kyles <skyles@elkgrovecity.org>
Re: Notice of Preparation of an EIR for the Housing Element Update

---

The meeting is holding in week day, how the working residences can attended.
Joshua Liu

From: "rwichert@frontiernet.net" <rwichert@frontiernet.net>
To: 'Betty Verhoeven' <pattypetangel@yahoo.com>; 'Claudette Mack' <mcmack@frontiernet.net>; 'Dan Camara' <dancamara@comcast.net>; 'Fanny Tung' <lingtung8@gmail.com>; 'Gina Kanter' <grkanter@gmail.com>; 'Ginger Black' <gblackinc@yahoo.com>; 'Hoover Yee' <hooveryee@technisource.com>; 'James Sweeney' <jameswsweeney@comcast.net>; 'Jim Carr' <jcarr9987@comcast.net>; 'Jim Silva' <jimasilva@frontiernet.net>; 'Johua and Jane Liu' <jiashuleo@yahoo.com>; Kam and Nam Wong <ahchan52@hotmail.com>; 'Kelly Louie' <kelly2004@pacbell.net>; 'Martin Mack' <martymack@frontiernet.net>; 'Melanie Crook' <melaniedcrook@yahoo.com>; 'Mike & Hildy Tuttle' <michael.tuttle@frontiernet.net>; 'Milton & Mayra Dorsey' <mdorsey007@yahoo.com>; 'Pam Gibbs' <djpam92@yahoo.com>; 'Phil & Patricia Litts' <patricia@eichele.com>; 'Randy Wichert' <rwichert@frontiernet.net>; 'Rochester Fan' <rochester_fan@juno.com>; 'Ross du Clair' <rduclair@emfbroadcasting.com>; 'Sally Louie' <beebbie@yahoo.com>; 'Sharla Freeman' <sharfreem@gmail.com>; 'Zhong Shao' <zjsw1926@yahoo.com>
Sent: Saturday, August 3, 2013 3:48 PM
Subject: FW: Notice of Preparation of an EIR for the Housing Element Update

Hi Neighbors: You are encouraged to attend the Environmental Quality meeting on August 15th (see below) or send in your comments to the address below prior to August 15, 2013. This meeting is in follow-up to the May 16, 2013 City Council Meeting regarding the addition of 3,500 dwelling units affordable to low and very low income households. There are approximately five/six immediate sites to the Laguna Town Hall area being considered.

Thanks, Randy

NOTICE OF PREPARATION

DATE:	**August 2, 2013**
TO:	**Office of Planning and Research, Responsible and Trustee Agencies**
LEAD AGENCY:	**City of Elk Grove** **Contact: Christopher Jordan, AICP** **8401 Laguna Palms Way** **Elk Grove, CA 95758**
SUBJECT:	**Environmental Impact Report for Housing Element Update**

In discharging its duties under Section 15021 of the California Environmental Quality Act (CEQA) Guidelines, the City of Elk Grove (as Lead Agency, hereinafter City) intends to prepare an Environmental Impact Report (EIR) for the 2013 Housing Element Update (the Project). In accordance with Section 15082 of the CEQA Guidelines, the City of Elk Grove has prepared this Notice of Preparation (NOP) to provide the Office of Planning and Research, Responsible and Trustee Agencies, and other interested parties with sufficient information describing the Project and its potential environmental effects.

The determination to prepare an EIR was made by the City following preliminary review of the Project. Probable environmental effects of the Project are described in the full Notice of Preparation, which may be viewed at the City of Elk Grove City Hall, Development Services-

Planning, 8401 Laguna Palms Way; or via the internet at http://www.egplanning.org/environmental/.

Project Overview

The proposed project consists of the adoption and implementation of the 2013 Housing Element Update (the Project). The Project has been prepared to ensure the City's ability to accommodate housing needs, including Elk Grove's fair-share of the 2013-2021 Regional Housing Needs Allocation (RHNA). In accordance with State law, the Housing Element contains a housing plan that establishes goals, policies, and actions to address the City's housing needs. These policies and actions ensure adequate sites to accommodate housing needs, as well as provide incentives for production of affordable and special-needs housing and reduce barriers to the production of housing.

The Housing Element includes the following components, consistent with the requirement of Government Code Section 65583:

- A review of the previous element's goals, policies, programs, and objectives to ascertain the effectiveness of each of these components, as well as the overall effectiveness of the Housing Element.
- An assessment of housing needs and an inventory of resources and constraints related to the meeting of these needs, including an inventory of sites available to accommodate the RHNA.
- An analysis and program for preserving assisted housing developments.
- A statement of community goals, quantified objectives, and policies relative to the preservation, improvement, and development of housing.
- A program which sets forth a schedule of actions that the City is undertaking or intends to undertake, in implementing the policies set forth in the Housing Element to identify adequate sites to accommodate the housing needs of all economic segments of the community. The program must do all of the following:
  - Identify actions that will be taken to make adequate sites available to accommodate the City's share of the regional housing need, if the need could not be accommodated by the existing inventory of residential sites;
  - Assist in the development of adequate housing to meet the needs of extremely low, very low, low, and moderate income households;
  - Address and, where appropriate, remove governmental constraints to the maintenance, improvement, and development of housing;
  - Conserve and improve the condition of the existing affordable housing stock;
  - Promote housing opportunities for all persons regardless of race, religion, sex,
- marital status, ancestry, national origin, color, familial status, or disability; and
- Preserve assisted housing developments for lower income households.
- Identify the agencies and officials responsible for implementation of the actions and the means by which consistency will be achieved with other General Plan elements and community goals.
- Include a diligent effort to achieve public participation of all economic segments of the community.

The Housing Element Update focuses on revisions to the adopted Housing Element that are necessary to comply with changes to State law and that are needed to reflect changes that have occurred since adoption of the current Housing Element in 2008. These changes include updated demographic information, updated housing needs data, updated analysis of the availability of housing sites to meet the City's needs, and an updated Housing Program to establish goals, policies, and actions to address the City's housing needs. The Housing Element map of available housing sites will be updated to identify adequate sites to accommodate the City's 2013-2021 RHNA, and the City will concurrently amend the General Plan Land Use Map and Zoning Map to accommodate the housing sites. The sites are described in greater detail in the full Notice of Preparation referenced above.

Public Comment Opportunity

As specified by the CEQA Guidelines, the Notice of Preparation shall be circulated for a 30-day review period. **The comment period runs from Friday, August 2, 2013 to Monday, September 2, 2013.** The City welcomes public input during this review. In the event that no response or request for additional time is received by any responsible agency by the end of the review period, the Lead Agency may presume that the responsible agency has no response [CEQA Guidelines Section 15082(b(2)].

Comments may be submitted in person at the Scoping Meeting or in writing during the review period and addressed to:

City of Elk Grove
Planning Department
c/o Sarah Bontrager, Housing Program Manager
8401 Laguna Palms Way
Elk Grove, CA 95758

A Scoping Meeting will be held on August 15, 2013 at 10 A.M. in the City of Elk Grove Council Chambers, located at 8400 Laguna Palms Way, Elk Grove, CA.

Sandy Kyles
Planning Specialist

City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

916.478.3620 (desk)
916.691.3175 (fax)
Skyles@elkgrovecity.org

www.elkgrovecity.org

APPENDIX B

Air Quality Model Calculations

Elk Grove Housing Element

Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	4,875.00	Dwelling Unit	353.50	4,875,000.00	15680

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2014
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Increased acreage and population to consistent with Project assumptions.

Land Use Change -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	128.29	353.50
tblLandUse	Population	13,016.00	15,680.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.8890	49.6279	37.1179	0.0412	0.1141	2.5280	2.6421	0.0303	2.3601	2.3904	0.0000	4,277.3955	4,277.3955	1.1323	0.0000	4,301.1745
2015	5.5825	56.9600	43.5134	0.0412	18.2032	3.0893	21.2925	9.9670	2.8422	12.8092	0.0000	4,242.8952	4,242.8952	1.2352	0.0000	4,268.8339
2016	6.8074	74.9032	50.0086	0.0634	18.2032	3.5854	21.1429	9.9670	3.2985	12.6715	0.0000	6,555.3588	6,555.3588	1.9427	0.0000	6,596.1557
2017	6.3992	69.6719	47.5789	0.0634	8.8255	3.3183	12.1438	3.6369	3.0528	6.6897	0.0000	6,448.1886	6,448.1886	1.9415	0.0000	6,488.9591
2018	60.8092	71.6455	230.5712	0.4340	29.7610	2.7891	31.9800	7.9539	2.5660	10.0259	0.0000	35,780.8227	35,780.8227	1.9406	0.0000	35,821.5757
2019	56.5688	65.0437	215.8890	0.4323	29.7617	1.9671	31.7288	7.9542	1.8367	9.7909	0.0000	34,661.1036	34,661.1036	1.7649	0.0000	34,698.1666
2020	52.3906	57.9596	202.0572	0.4321	29.7623	1.7411	31.5034	7.9544	1.6257	9.5801	0.0000	33,523.8054	33,523.8054	1.6957	0.0000	33,559.4150
2021	49.5784	50.9278	191.7424	0.4319	29.7632	1.5398	31.3030	7.9547	1.4374	9.3921	0.0000	33,162.9120	33,162.9120	1.6404	0.0000	33,197.3606
2022	47.4820	46.0487	183.1024	0.4319	29.7644	1.3845	31.1488	7.9552	1.2920	9.2472	0.0000	32,849.7939	32,849.7939	1.5967	0.0000	32,883.3254
2023	45.4403	42.2418	174.1038	0.4318	29.7654	1.2519	31.0174	7.9556	1.1679	9.1235	0.0000	32,565.4940	32,565.4940	1.5541	0.0000	32,598.1301
2024	43.6711	40.6410	166.1047	0.4318	29.7666	1.1689	30.9355	7.9560	1.0896	9.0456	0.0000	32,327.9965	32,327.9965	1.5215	0.0000	32,359.9484
2025	42.4907	39.0965	162.8817	0.4319	29.7674	1.0863	30.8537	7.9563	1.0118	8.9681	0.0000	32,120.5198	32,120.5198	1.4940	0.0000	32,151.8932
2026	41.3722	38.5723	158.6718	0.4319	29.7682	1.0884	30.8566	7.9566	1.0138	8.9704	0.0000	31,944.4533	31,944.4533	1.4738	0.0000	31,975.4028
2027	40.3278	38.1304	155.1308	0.4320	29.7691	1.0909	30.8599	7.9570	1.0160	8.9730	0.0000	31,792.5971	31,792.5971	1.4558	0.0000	31,823.1682
2028	39.2850	37.7313	151.6705	0.4320	29.7697	1.0926	30.8624	7.9572	1.0176	8.9749	0.0000	31,661.6960	31,661.6960	1.4396	0.0000	31,691.9275
2029	38.2745	37.3703	148.7491	0.4320	29.7704	1.0940	30.8644	7.9575	1.0189	8.9764	0.0000	31,549.8832	31,549.8832	1.4240	0.0000	31,579.7871
2030	37.2729	32.5510	146.7153	0.4360	29.7710	0.7177	30.4888	7.9577	0.6737	8.6314	0.0000	31,795.3254	31,795.3254	0.9280	0.0000	31,814.8136
2031	36.4051	32.2609	144.8152	0.4361	29.7718	0.7187	30.4905	7.9580	0.6746	8.6326	0.0000	31,718.9636	31,718.9636	0.9151	0.0000	31,738.1806
2032	35.6014	32.0099	143.1962	0.4362	29.7726	0.7195	30.4921	7.9583	0.6753	8.6337	0.0000	31,656.1266	31,656.1266	0.9038	0.0000	31,675.1053
2033	34.8940	31.7934	141.9066	0.4362	29.7733	0.7201	30.4934	7.9586	0.6759	8.6345	0.0000	31,604.8724	31,604.8724	0.8942	0.0000	31,623.6509
2034	34.0232	31.6056	140.6404	0.4363	29.7740	0.7204	30.4944	7.9589	0.6761	8.6351	0.0000	31,562.2281	31,562.2281	0.8851	0.0000	31,580.8158
2035	33.1532	30.6835	139.4729	0.4363	29.7746	0.6629	30.4375	7.9592	0.6186	8.5778	0.0000	31,527.2491	31,527.2491	0.8690	0.0000	31,545.4989
2036	1.2123	7.1510	16.0922	0.0308	25.4417	0.0901	25.5318	6.2448	0.0901	6.3348	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2037	1.2123	7.1510	16.0922	0.0308	25.4417	0.0901	25.5318	6.2448	0.0901	6.3348	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878

2038	1.2123	7.1510	16.0922	0.0308	25.4417	0.0901	25.5318	6.2448	0.0901	6.3348	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2039	1.2123	7.1510	16.0922	0.0308	25.4417	0.0901	25.5318	6.2448	0.0901	6.3348	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2040	1.1926	6.8826	16.0929	0.0308	25.4417	0.0734	25.5152	6.2448	0.0734	6.3182	0.0000	2,884.8303	2,884.8303	0.1038	0.0000	2,887.0091
2041	1.1926	6.8826	16.0929	0.0308	25.4417	0.0734	25.5152	6.2448	0.0734	6.3182	0.0000	2,884.8303	2,884.8303	0.1038	0.0000	2,887.0091
2042	1.1926	6.8826	16.0929	0.0308	25.4417	0.1138	25.5152	6.2448	0.1138	6.3182	0.0000	2,884.8303	2,884.8303	0.1038	0.0000	2,887.0091
2043	0.9902	3.5998	15.4879	0.0275	0.0992	0.1138	0.2130	0.0243	0.1138	0.1381	0.0000	2,599.9866	2,599.9866	0.0874	0.0000	2,601.8224
2044	0.9902	3.5998	15.4879	0.0275	4.6406	0.1138	4.6480	1.1391	0.1138	1.1465	0.0000	2,599.9866	2,599.9866	0.0874	0.0000	2,601.8224
2045	0.1149	0.7270	1.7923	2.9700e-003	4.6406	7.4300e-003	4.6480	1.1391	7.4300e-003	1.1465	0.0000	281.4481	281.4481	9.9000e-003	0.0000	281.6561
Total	**803.4405**	**1,064.6744**	**3,323.0554**	**8.2852**	**768.6451**	**34.9309**	**802.2134**	**212.8365**	**32.4971**	**244.0988**	**0.0000**	**631,004.9129**	**631,004.9129**	**31.5741**	**0.0000**	**631,667.9682**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.8847	49.5824	37.0846	0.0412	0.1141	2.5257	2.6398	0.0303	2.3580	2.3882	0.0000	4,273.5752	4,273.5752	1.1313	0.0000	4,297.3324
2015	5.5777	56.9278	43.4743	0.0412	7.1828	3.0865	10.2693	3.9093	2.8396	6.7489	0.0000	4,239.1229	4,239.1229	1.2341	0.0000	4,265.0379
2016	6.8015	74.8346	49.9635	0.0634	7.1828	3.5821	10.1198	3.9093	3.2955	6.6113	0.0000	6,549.4734	6,549.4734	1.9409	0.0000	6,590.2330
2017	6.3936	69.6080	47.5360	0.0634	3.5347	3.3152	6.8500	1.4430	3.0500	4.4930	0.0000	6,442.3964	6,442.3964	1.9397	0.0000	6,483.1296
2018	60.8067	71.6242	230.5552	0.4340	29.7810	2.7865	31.9786	7.9539	2.5636	10.0247	0.0000	35,778.4283	35,778.4283	1.9388	0.0000	35,819.1439
2019	56.5667	65.0245	215.8733	0.4323	29.7617	1.9659	31.7276	7.9542	1.8356	9.7898	0.0000	34,658.7359	34,658.7359	1.7643	0.0000	34,695.7868
2020	52.3886	57.9421	202.0417	0.4320	29.7623	1.7401	31.5024	7.9544	1.6248	9.5792	0.0000	33,521.4728	33,521.4728	1.6951	0.0000	33,557.0705
2021	49.5767	50.9119	191.7272	0.4319	29.7632	1.5389	31.3021	7.9547	1.4365	9.3913	0.0000	33,160.5791	33,160.5791	1.6399	0.0000	33,195.0161
2022	47.4804	46.0345	183.0875	0.4319	29.7644	1.3837	31.1481	7.9552	1.2913	9.2465	0.0000	32,847.4602	32,847.4602	1.5962	0.0000	32,880.9799
2023	45.4389	42.2286	174.0889	0.4317	29.7654	1.2513	31.0167	7.9556	1.1673	9.1229	0.0000	32,563.1595	32,563.1595	1.5535	0.0000	32,595.7839
2024	43.8698	40.6288	168.0899	0.4318	29.7666	1.1684	30.9350	7.9560	1.0890	9.0450	0.0000	32,325.6615	32,325.6615	1.5210	0.0000	32,357.8019
2025	42.4894	39.0851	162.6670	0.4318	29.7674	1.0858	30.8532	7.9563	1.0113	8.9677	0.0000	32,118.1841	32,118.1841	1.4934	0.0000	32,149.5460
2026	41.3709	38.5609	158.6570	0.4319	29.7682	1.0879	30.8561	7.9566	1.0133	8.9699	0.0000	31,942.1176	31,942.1176	1.4732	0.0000	31,973.0556

2027	40.3265	38.1190	155.1161	0.4319	29.7691	1.0904	30.8595	7.9570	1.0156	8.9725	0.0000	31,790.2614	31,790.2614	1.4552	0.0000	31,820.6209
2028	39.2837	37.7200	151.6557	0.4320	29.7697	1.0921	30.8619	7.9572	1.0172	8.9744	0.0000	31,659.3603	31,659.3603	1.4390	0.0000	31,689.5802
2029	38.2732	37.3589	148.7343	0.4320	29.7704	1.0935	30.8639	7.9575	1.0185	8.9760	0.0000	31,547.5475	31,547.5475	1.4235	0.0000	31,577.4398
2030	37.2717	32.5437	146.7005	0.4360	29.7710	0.7176	30.4886	7.9577	0.6735	8.6313	0.0000	31,792.6787	31,792.6787	0.9279	0.0000	31,812.1647
2031	36.4039	32.2536	144.8004	0.4361	29.7718	0.7186	30.4904	7.9580	0.6744	8.6325	0.0000	31,716.3169	31,716.3169	0.9150	0.0000	31,735.5317
2032	35.6002	32.0027	143.1814	0.4361	29.7726	0.7194	30.4919	7.9583	0.6752	8.6335	0.0000	31,653.4799	31,653.4799	0.9036	0.0000	31,672.4564
2033	34.8928	31.7861	141.8918	0.4362	29.7733	0.7200	30.4933	7.9586	0.6757	8.6344	0.0000	31,602.2258	31,602.2258	0.8941	0.0000	31,621.0020
2034	34.0220	31.5983	140.6256	0.4362	29.7740	0.7203	30.4943	7.9589	0.6760	8.6349	0.0000	31,559.5814	31,559.5814	0.8850	0.0000	31,578.1668
2035	33.1521	30.6789	139.4581	0.4363	29.7746	0.6628	30.4374	7.9592	0.6185	8.5777	0.0000	31,524.6025	31,524.6025	0.8689	0.0000	31,542.8502
2036	1.2112	7.1444	16.0774	0.0308	25.4417	0.0900	25.5317	6.2448	0.0900	6.3348	0.0000	2,882.1833	2,882.1833	0.1074	0.0000	2,884.4391
2037	1.2112	7.1444	16.0774	0.0308	25.4417	0.0900	25.5317	6.2448	0.0900	6.3348	0.0000	2,882.1833	2,882.1833	0.1074	0.0000	2,884.4391
2038	1.2112	7.1444	16.0774	0.0308	25.4417	0.0900	25.5317	6.2448	0.0900	6.3348	0.0000	2,882.1833	2,882.1833	0.1074	0.0000	2,884.4391
2039	1.2112	7.1444	16.0774	0.0308	25.4417	0.0900	25.5317	6.2448	0.0900	6.3348	0.0000	2,882.1833	2,882.1833	0.1074	0.0000	2,884.4391
2040	1.1915	6.8763	16.0781	0.0308	25.4417	0.0734	25.5151	6.2448	0.0734	6.3182	0.0000	2,882.1837	2,882.1837	0.1037	0.0000	2,884.3604
2041	1.1915	6.8763	16.0781	0.0308	25.4417	0.0734	25.5151	6.2448	0.0734	6.3182	0.0000	2,882.1837	2,882.1837	0.1037	0.0000	2,884.3604
2042	1.1915	6.8763	16.0781	0.0308	25.4417	0.1137	25.5151	6.2448	0.1137	6.3182	0.0000	2,882.1837	2,882.1837	0.1037	0.0000	2,884.3604
2043	0.9893	3.5965	15.4737	0.0274	0.0992	0.1137	0.2128	0.0243	0.1137	0.1380	0.0000	2,597.6013	2,597.6013	0.0873	0.0000	2,599.4354
2044	0.9893	3.5965	15.4737	0.0274	4.6406	0.1137	4.6480	1.1391	0.1137	1.1465	0.0000	2,597.6013	2,597.6013	0.0873	0.0000	2,599.4354
2045	0.1148	0.7264	1.7907	2.9700e-003	4.6406	7.4200e-003	4.6480	1.1391	7.4200e-003	1.1465	0.0000	281.1898	281.1898	9.9000e-003	0.0000	281.3977
Total	**803.3844**	**1,064.1784**	**3,322.4921**	**8.2844**	**741.3135**	**34.9078**	**774.8607**	**198.5272**	**32.4756**	**229.7698**	**0.0000**	**630,918.0975**	**630,918.0975**	**31.5590**	**0.0000**	**631,580.8363**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.01	0.05	0.02	0.01	3.56	0.07	3.41	6.72	0.07	5.87	0.00	0.01	0.01	0.05	0.00	0.01

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Area	134.4759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076
Energy	1.4371	12.2809	5.2259	0.0784		0.9929	0.9929		0.9929	0.9929		15,677.7329	15,677.7329	0.3005	0.2874	15,773.1450
Mobile	477.9283	379.1376	1,811.2320	2.5624	189.5906	5.0607	194.6513	50.6389	4.6428	55.2817		234,826.9236	234,826.9236	12.1520		235,082.1155
Total	**613.8413**	**396.3022**	**2,228.4760**	**2.6621**	**189.5906**	**8.2414**	**197.8320**	**50.6389**	**7.8235**	**58.4624**	**0.0000**	**251,228.8489**	**251,228.8489**	**13.2246**	**0.2874**	**251,595.6681**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	126.6759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076
Energy	1.1991	10.2472	4.3605	0.0654		0.8285	0.8285		0.8285	0.8285		13,081.5302	13,081.5302	0.2507	0.2398	13,161.1422
Mobile	477.2714	378.6261	1,809.4196	2.5585	189.2868	5.0532	194.3400	50.5578	4.6359	55.1937		234,462.8372	234,462.8372	12.1350		234,717.6728
Total	**605.1464**	**393.7570**	**2,225.7982**	**2.6451**	**189.2868**	**8.0695**	**197.3563**	**50.5578**	**7.8522**	**58.2100**	**0.0000**	**248,268.5599**	**248,268.5599**	**13.1579**	**0.2398**	**248,619.2226**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	1.42	0.64	0.12	0.64	0.16	2.09	0.24	0.16	2.19	0.43	0.00	1.18	1.18	0.50	16.56	1.18

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2014	7/14/2015	5	400	
2	Site Preparation	Site Preparation	7/15/2015	6/14/2016	5	240	
3	Grading	Grading	6/15/2016	10/30/2018	5	620	
4	Building Construction	Building Construction	10/31/2018	8/5/2042	5	6200	
5	Paving	Paving	8/6/2042	4/12/2044	5	440	
6	Architectural Coating	Architectural Coating	4/13/2044	12/19/2045	5	440	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1550

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,510.00	521.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	702.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593		4,164.0858	4,164.0858	1.1253		4,187.7164
Total	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593		4,164.0858	4,164.0858	1.1253		4,187.7164

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2928	0.0849	0.8306	1.2800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.6000e-004	0.0311		113.3097	113.3097	7.0600e-003		113.4580
Total	0.2928	0.0849	0.8306	1.2800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.6000e-004	0.0311		113.3097	113.3097	7.0600e-003		113.4580

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5920	49.4975	36.2540	0.0399		2.5247	2.5247		2.3571	2.3571	0.0000	4,160.2655	4,160.2655	1.1242		4,183.8744

Total	4.5920	49.4975	36.2540	0.0399		2.5247	2.5247		2.3571	2.3571	0.0000	4,160.2655	4,160.2655	1.1242		4,183.8744

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2928	0.0849	0.8306	1.2800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.6000e-004	0.0311		113.3097	113.3097	7.0600e-003		113.4580
Total	**0.2928**	**0.0849**	**0.8306**	**1.2800e-003**	**0.1141**	**9.5000e-004**	**0.1151**	**0.0303**	**8.6000e-004**	**0.0311**		**113.3097**	**113.3097**	**7.0600e-003**		**113.4580**

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**		**2.4508**	**2.4508**		**2.2858**	**2.2858**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2680	0.0753	0.7347	1.2800e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		109.2923	109.2923	6.3700e-003		109.4262
Total	**0.2680**	**0.0753**	**0.7347**	**1.2800e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**109.2923**	**109.2923**	**6.3700e-003**		**109.4262**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5041	48.3186	36.0407	0.0399		2.4486	2.4486		2.2837	2.2837	0.0000	4,123.4069	4,123.4069	1.1178		4,146.8806
Total	**4.5041**	**48.3186**	**36.0407**	**0.0399**		**2.4486**	**2.4486**		**2.2837**	**2.2837**	**0.0000**	**4,123.4069**	**4,123.4069**	**1.1178**		**4,146.8806**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2680	0.0753	0.7347	1.2800e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		109.2923	109.2923	6.3700e-003		109.4262
Total	**0.2680**	**0.0753**	**0.7347**	**1.2800e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**109.2923**	**109.2923**	**6.3700e-003**		**109.4262**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3216	0.0903	0.8816	1.5400e-003	0.1369	1.0600e-003	0.1380	0.0363	9.7000e-004	0.0373		131.1508	131.1508	7.6500e-003		131.3115
Total	**0.3216**	**0.0903**	**0.8816**	**1.5400e-003**	**0.1369**	**1.0600e-003**	**0.1380**	**0.0363**	**9.7000e-004**	**0.0373**		**131.1508**	**131.1508**	**7.6500e-003**		**131.3115**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	5.2561	56.8375	42.5927	0.0391		3.0855	3.0855		2.8386	2.8386	0.0000	4,107.9721	4,107.9721	1.2264		4,133.7265
Total	**5.2561**	**56.8375**	**42.5927**	**0.0391**	**7.0458**	**3.0855**	**10.1313**	**3.8730**	**2.8386**	**6.7116**	**0.0000**	**4,107.9721**	**4,107.9721**	**1.2264**		**4,133.7265**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3216	0.0903	0.8816	1.5400e-003	0.1369	1.0600e-003	0.1380	0.0363	9.7000e-004	0.0373		131.1508	131.1508	7.6500e-003		131.3115
Total	**0.3216**	**0.0903**	**0.8816**	**1.5400e-003**	**0.1369**	**1.0600e-003**	**0.1380**	**0.0363**	**9.7000e-004**	**0.0373**		**131.1508**	**131.1508**	**7.6500e-003**		**131.3115**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2952	0.0805	0.7841	1.5400e-003	0.1369	1.0100e-003	0.1379	0.0363	9.2000e-004	0.0373		126.3402	126.3402	6.9500e-003		126.4862
Total	**0.2952**	**0.0805**	**0.7841**	**1.5400e-003**	**0.1369**	**1.0100e-003**	**0.1379**	**0.0363**	**9.2000e-004**	**0.0373**		**126.3402**	**126.3402**	**6.9500e-003**		**126.4862**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	5.0724	54.5822	41.0676	0.0391		2.9360	2.9360		2.7011	2.7011	0.0000	4,061.2758	4,061.2758	1.2250		4,087.0014
Total	5.0724	54.5822	41.0676	0.0391	7.0458	2.9360	9.9818	3.8730	2.7011	6.5741	0.0000	4,061.2758	4,061.2758	1.2250		4,087.0014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2952	0.0805	0.7841	1.5400e-003	0.1369	1.0100e-003	0.1379	0.0363	9.2000e-004	0.0373		126.3402	126.3402	6.9500e-003		126.4862
Total	0.2952	0.0805	0.7841	1.5400e-003	0.1369	1.0100e-003	0.1379	0.0363	9.2000e-004	0.0373		126.3402	126.3402	6.9500e-003		126.4862

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	6.4795	74.8137	49.1374	0.0617	8.6733	3.5842	12.2576	3.5965	3.2975	6.8940		6,414.9807	6,414.9807	1.9350		6,455.6154

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3279	0.0895	0.8712	1.7100e-003	0.1521	1.1200e-003	0.1533	0.0404	1.0300e-003	0.0414		140.3780	140.3780	7.7200e-003		140.5402
Total	**0.3279**	**0.0895**	**0.8712**	**1.7100e-003**	**0.1521**	**1.1200e-003**	**0.1533**	**0.0404**	**1.0300e-003**	**0.0414**		**140.3780**	**140.3780**	**7.7200e-003**		**140.5402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	6.4735	74.7451	49.0923	0.0617		3.5810	3.5810		3.2945	3.2945	0.0000	6,409.0953	6,409.0953	1.9332		6,449.6927
Total	**6.4735**	**74.7451**	**49.0923**	**0.0617**	**3.3826**	**3.5810**	**6.9636**	**1.4026**	**3.2945**	**4.6971**	**0.0000**	**6,409.0953**	**6,409.0953**	**1.9332**		**6,449.6927**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3279	0.0895	0.8712	1.7100e-003	0.1521	1.1200e-003	0.1533	0.0404	1.0300e-003	0.0414		140.3780	140.3780	7.7200e-003		140.5402
Total	**0.3279**	**0.0895**	**0.8712**	**1.7100e-003**	**0.1521**	**1.1200e-003**	**0.1533**	**0.0404**	**1.0300e-003**	**0.0414**		**140.3780**	**140.3780**	**7.7200e-003**		**140.5402**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	6.0991	69.5920	46.8050	0.0617	8.6733	3.3172	11.9905	3.5965	3.0518	6.6483		6,313.3690	6,313.3690	1.9344		6,353.9915

***Unmitigated Construction* Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3000	0.0799	0.7739	1.7100e-003	0.1521	1.0800e-003	0.1532	0.0404	1.0000e-003	0.0414		134.8196	134.8196	7.0500e-003		134.9676
Total	0.3000	0.0799	0.7739	1.7100e-003	0.1521	1.0800e-003	0.1532	0.0404	1.0000e-003	0.0414		134.8196	134.8196	7.0500e-003		134.9676

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	6.0935	69.5281	46.7621	0.0617		3.3142	3.3142		3.0490	3.0490	0.0000	6,307.5768	6,307.5768	1.9326		6,348.1621
Total	6.0935	69.5281	46.7621	0.0617	3.3826	3.3142	6.6968	1.4026	3.0490	4.4517	0.0000	6,307.5768	6,307.5768	1.9326		6,348.1621

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3000	0.0799	0.7739	1.7100e-003	0.1521	1.0800e-003	0.1532	0.0404	1.0000e-003	0.0414		134.8196	134.8196	7.0500e-003		134.9676
Total	**0.3000**	**0.0799**	**0.7739**	**1.7100e-003**	**0.1521**	**1.0800e-003**	**0.1532**	**0.0404**	**1.0000e-003**	**0.0414**		**134.8196**	**134.8196**	**7.0500e-003**		**134.9676**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650		6,212.8042	6,212.8042	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**8.6733**	**2.7880**	**11.4614**	**3.5965**	**2.5650**	**6.1615**		**6,212.8042**	**6,212.8042**	**1.9341**		**6,253.4209**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2759	0.0719	0.6924	1.7100e-003	0.1521	1.0600e-003	0.1532	0.0404	9.8000e-004	0.0413		129.7203	129.7203	6.4800e-003		129.8564
Total	**0.2759**	**0.0719**	**0.6924**	**1.7100e-003**	**0.1521**	**1.0600e-003**	**0.1532**	**0.0404**	**9.8000e-004**	**0.0413**		**129.7203**	**129.7203**	**6.4800e-003**		**129.8564**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	5.2847	59.4792	42.2680	0.0617		2.7855	2.7855		2.5626	2.5626	0.0000	6,207.1042	6,207.1042	1.9324		6,247.6837
Total	5.2847	59.4792	42.2680	0.0617	3.3826	2.7855	6.1681	1.4026	2.5626	3.9653	0.0000	6,207.1042	6,207.1042	1.9324		6,247.6837

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2759	0.0719	0.6924	1.7100e-003	0.1521	1.0600e-003	0.1532	0.0404	9.8000e-004	0.0413		129.7203	129.7203	6.4800e-003		129.8564
Total	0.2759	0.0719	0.6924	1.7100e-003	0.1521	1.0600e-003	0.1532	0.0404	9.8000e-004	0.0413		129.7203	129.7203	6.4800e-003		129.8564

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.7230	35.7655	91.5241	0.1079	3.0604	0.5389	3.5994	0.8713	0.4953	1.3667		10,404.9808	10,404.9808	0.0804		10,406.6690
Worker	48.4175	12.6191	121.5145	0.2993	26.7005	0.1858	26.8863	7.0826	0.1720	7.2545		22,765.9030	22,765.9030	1.1379		22,789.7998
Total	58.1405	48.3847	213.0386	0.4072	29.7609	0.7247	30.4857	7.9539	0.6673	8.6212		33,170.8838	33,170.8838	1.2183		33,196.4688

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6662	23.2395	17.5166	0.0268		1.4929	1.4929		1.4035	1.4035	0.0000	2,607.5445	2,607.5445	0.6381		2,620.9449
Total	2.6662	23.2395	17.5166	0.0268		1.4929	1.4929		1.4035	1.4035	0.0000	2,607.5445	2,607.5445	0.6381		2,620.9449

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.7230	35.7655	91.5241	0.1079	3.0604	0.5389	3.5994	0.8713	0.4953	1.3667		10,404.9808	10,404.9808	0.0804		10,406.6690
Worker	48.4175	12.6191	121.5145	0.2993	26.7005	0.1858	26.8863	7.0826	0.1720	7.2545		22,765.9030	22,765.9030	1.1379		22,789.7998
Total	58.1405	48.3847	213.0386	0.4072	29.7609	0.7247	30.4857	7.9539	0.6673	8.6212		33,170.8838	33,170.8838	1.2183		33,196.4688

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.6338	32.5395	87.2634	0.1078	3.0612	0.4985	3.5597	0.8716	0.4583	1.3299		10,236.3124	10,236.3124	0.0784		10,237.9587
Worker	45.5834	11.5392	111.5052	0.2977	26.7005	0.1835	26.8841	7.0826	0.1701	7.2527		21,844.0295	21,844.0295	1.0586		21,866.2601
Total	54.2172	44.0787	198.7686	0.4055	29.7617	0.6820	30.4438	7.9542	0.6284	8.5826		32,080.3419	32,080.3419	1.1370		32,104.2187

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3495	20.9458	17.1046	0.0268		1.2839	1.2839		1.2072	1.2072	0.0000	2,578.3941	2,578.3941	0.6273		2,591.5681
Total	2.3495	20.9458	17.1046	0.0268		1.2839	1.2839		1.2072	1.2072	0.0000	2,578.3941	2,578.3941	0.6273		2,591.5681

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.6338	32.5395	87.2634	0.1078	3.0612	0.4985	3.5597	0.8716	0.4583	1.3299		10,236.3124	10,236.3124	0.0784		10,237.9587
Worker	45.5834	11.5392	111.5052	0.2977	26.7005	0.1835	26.8841	7.0826	0.1701	7.2527		21,844.0295	21,844.0295	1.0586		21,866.2601
Total	54.2172	44.0787	198.7686	0.4055	29.7617	0.6820	30.4438	7.9542	0.6284	8.5826		32,080.3419	32,080.3419	1.1370		32,104.2187

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.9353	28.1929	81.8767	0.1076	3.0618	0.4447	3.5064	0.8718	0.4090	1.2808		10,002.3134	10,002.3134	0.0757		10,003.9035
Worker	43.3440	10.6829	103.3720	0.2977	26.7005	0.1836	26.8842	7.0826	0.1703	7.2528		20,979.0121	20,979.0121	1.0005		21,000.0235
Total	50.2793	38.8757	185.2487	0.4053	29.7623	0.6283	30.3906	7.9544	0.5793	8.5337		30,981.3255	30,981.3255	1.0763		31,003.9270

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1093	19.0664	16.7930	0.0268		1.1118	1.1118		1.0455	1.0455	0.0000	2,540.1473	2,540.1473	0.6189		2,553.1435
Total	2.1093	19.0664	16.7930	0.0268		1.1118	1.1118		1.0455	1.0455	0.0000	2,540.1473	2,540.1473	0.6189		2,553.1435

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.9353	28.1929	81.8767	0.1076	3.0618	0.4447	3.5064	0.8718	0.4090	1.2808		10,002.3134	10,002.3134	0.0757		10,003.9035
Worker	43.3440	10.6829	103.3720	0.2977	26.7005	0.1836	26.8842	7.0826	0.1703	7.2528		20,979.0121	20,979.0121	1.0005		21,000.0235
Total	50.2793	38.8757	185.2487	0.4053	29.7623	0.6283	30.3906	7.9544	0.5793	8.5337		30,981.3255	30,981.3255	1.0763		31,003.9270

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.2245	23.6122	78.4894	0.1074	3.0626	0.4004	3.4630	0.8722	0.3684	1.2405		9,996.6595	9,996.6595	0.0753		9,998.2401
Worker	41.4608	9.9753	96.7153	0.2977	26.7005	0.1845	26.8851	7.0826	0.1712	7.2537		20,623.4708	20,623.4708	0.9526		20,643.4745
Total	47.6853	33.5876	175.2047	0.4051	29.7632	0.5849	30.3481	7.9547	0.5395	8.4942		30,620.1303	30,620.1303	1.0278		30,641.7146

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8914	17.3244	16.5225	0.0268		0.9540	0.9540		0.8970	0.8970	0.0000	2,540.4489	2,540.4489	0.6120		2,553.3015
Total	1.8914	17.3244	16.5225	0.0268		0.9540	0.9540		0.8970	0.8970	0.0000	2,540.4489	2,540.4489	0.6120		2,553.3015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.2245	23.6122	78.4894	0.1074	3.0626	0.4004	3.4630	0.8722	0.3684	1.2405		9,996.6595	9,996.6595	0.0753		9,998.2401
Worker	41.4608	9.9753	96.7153	0.2977	26.7005	0.1845	26.8851	7.0826	0.1712	7.2537		20,623.4708	20,623.4708	0.9526		20,643.4745

Total	47.6853	33.5876	175.2047	0.4051	29.7632	0.5849	30.3481	7.9547	0.5395	8.4942		30,620.1303	30,620.1303	1.0278		30,641.7146

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0231	21.1445	75.9245	0.1074	3.0638	0.3931	3.4569	0.8726	0.3617	1.2343		10,000.7147	10,000.7147	0.0765		10,002.3207
Worker	39.7597	9.3678	90.8504	0.2976	26.7005	0.1856	26.8862	7.0826	0.1722	7.2548		20,305.3295	20,305.3295	0.9117		20,324.4760
Total	45.7828	30.5123	166.7749	0.4051	29.7644	0.5787	30.3431	7.9552	0.5339	8.4890		30,306.0442	30,306.0442	0.9882		30,326.7967

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6976	15.5221	16.3126	0.0268		0.8050	0.8050		0.7574	0.7574	0.0000	2,541.4159	2,541.4159	0.6080		2,554.1832
Total	1.6976	15.5221	16.3126	0.0268		0.8050	0.8050		0.7574	0.7574	0.0000	2,541.4159	2,541.4159	0.6080		2,554.1832

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0231	21.1445	75.9245	0.1074	3.0638	0.3931	3.4569	0.8726	0.3617	1.2343		10,000.7147	10,000.7147	0.0765		10,002.3207
Worker	39.7597	9.3678	90.8504	0.2976	26.7005	0.1856	26.8862	7.0826	0.1722	7.2548		20,305.3295	20,305.3295	0.9117		20,324.4760
Total	45.7828	30.5123	166.7749	0.4051	29.7644	0.5787	30.3431	7.9552	0.5339	8.4890		30,306.0442	30,306.0442	0.9882		30,326.7967

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.6452	19.0831	72.1735	0.1073	3.0649	0.3683	3.4332	0.8730	0.3388	1.2119		9,998.9965	9,998.9965	0.0727		10,000.5226

Worker	38.2290	8.8461	85.7211	0.2976	26.7005	0.1869	26.8875	7.0826	0.1734	7.2560		20,021.8713	20,021.8713	0.8770		20,040.2884
Total	43.8742	27.9291	157.8945	0.4049	29.7654	0.5552	30.3207	7.9556	0.5123	8.4678		30,020.8678	30,020.8678	0.9497		30,040.8110

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5647	14.2995	16.1944	0.0268		0.6961	0.6961		0.6551	0.6551	0.0000	2,542.2917	2,542.2917	0.6039		2,554.9729
Total	1.5647	14.2995	16.1944	0.0268		0.6961	0.6961		0.6551	0.6551	0.0000	2,542.2917	2,542.2917	0.6039		2,554.9729

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.6452	19.0831	72.1735	0.1073	3.0649	0.3683	3.4332	0.8730	0.3388	1.2119		9,998.9965	9,998.9965	0.0727		10,000.5226
Worker	38.2290	8.8461	85.7211	0.2976	26.7005	0.1869	26.8875	7.0826	0.1734	7.2560		20,021.8713	20,021.8713	0.8770		20,040.2884
Total	43.8742	27.9291	157.8945	0.4049	29.7654	0.5552	30.3207	7.9556	0.5123	8.4678		30,020.8678	30,020.8678	0.9497		30,040.8110

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349

Total	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.5552	18.8594	70.4792	0.1074	3.0661	0.3700	3.4361	0.8735	0.3405	1.2139		10,010.5990	10,010.5990	0.0730		10,012.1318
Worker	36.8506	8.4043	81.4923	0.2976	26.7005	0.1884	26.8889	7.0826	0.1747	7.2573		19,772.2820	19,772.2820	0.8476		19,790.0818
Total	42.4058	27.2636	151.9715	0.4050	29.7666	0.5584	30.3250	7.9560	0.5152	8.4712		29,782.8810	29,782.8810	0.9206		29,802.2135

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4639	13.3651	16.1184	0.0268		0.6100	0.6100		0.5738	0.5738	0.0000	2,542.7804	2,542.7804	0.6004		2,555.3883
Total	1.4639	13.3651	16.1184	0.0268		0.6100	0.6100		0.5738	0.5738	0.0000	2,542.7804	2,542.7804	0.6004		2,555.3883

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	5.5552	18.8594	70.4792	0.1074	3.0661	0.3700	3.4361	0.8735	0.3405	1.2139		10,010.5990	10,010.5990	0.0730		10,012.1318
Worker	36.8506	8.4043	81.4923	0.2976	26.7005	0.1884	26.8889	7.0826	0.1747	7.2573		19,772.2820	19,772.2820	0.8476		19,790.0818
Total	**42.4058**	**27.2636**	**151.9715**	**0.4050**	**29.7666**	**0.5584**	**30.3250**	**7.9560**	**0.5152**	**8.4712**		**29,782.8810**	**29,782.8810**	**0.9206**		**29,802.2135**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.4631	18.6493	68.8069	0.1075	3.0689	0.3712	3.4381	0.8738	0.3415	1.2153		10,019.2380	10,019.2360	0.0732		10,020.7739
Worker	35.6661	8.0375	78.0230	0.2975	26.7005	0.1901	26.8906	7.0826	0.1764	7.2589		19,555.3932	19,555.3932	0.8232		19,572.6808
Total	**41.1292**	**26.6868**	**146.8300**	**0.4050**	**29.7674**	**0.5613**	**30.3287**	**7.9563**	**0.5179**	**8.4742**		**29,574.6293**	**29,574.6293**	**0.8965**		**29,593.4547**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913
Total	**1.3602**	**12.3983**	**16.0371**	**0.0268**		**0.5245**	**0.5245**		**0.4935**	**0.4935**	**0.0000**	**2,543.5548**	**2,543.5548**	**0.5970**		**2,556.0913**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.4631	18.6493	68.8069	0.1075	3.0669	0.3712	3.4381	0.8738	0.3415	1.2153		10,019.2360	10,019.2360	0.0732		10,020.7739
Worker	35.6661	8.0375	78.0230	0.2975	26.7005	0.1901	26.8906	7.0826	0.1764	7.2589		19,555.3932	19,555.3932	0.8232		19,572.6808
Total	**41.1292**	**26.6868**	**146.8300**	**0.4050**	**29.7674**	**0.5613**	**30.3287**	**7.9563**	**0.5179**	**8.4742**		**29,574.6293**	**29,574.6293**	**0.8965**		**29,593.4547**

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.4206	18.4308	67.4866	0.1075	3.0677	0.3713	3.4389	0.8741	0.3416	1.2157		10,028.2064	10,028.2064	0.0733		10,029.7466
Worker	34.5901	7.7318	75.1334	0.2975	26.7005	0.1921	26.8927	7.0826	0.1783	7.2608		19,370.3564	19,370.3564	0.8029		19,387.2176
Total	**40.0107**	**26.1626**	**142.6200**	**0.4051**	**29.7682**	**0.5634**	**30.3316**	**7.9566**	**0.5198**	**8.4765**		**29,398.5628**	**29,398.5628**	**0.8763**		**29,416.9643**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913
Total	**1.3602**	**12.3983**	**16.0371**	**0.0268**		**0.5245**	**0.5245**		**0.4935**	**0.4935**	**0.0000**	**2,543.5548**	**2,543.5548**	**0.5970**		**2,556.0913**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.4206	18.4308	67.4866	0.1075	3.0677	0.3713	3.4389	0.8741	0.3416	1.2157		10,028.2064	10,028.2064	0.0733		10,029.7466
Worker	34.5901	7.7318	75.1334	0.2975	26.7005	0.1921	26.8927	7.0826	0.1783	7.2608		19,370.3564	19,370.3564	0.8029		19,387.2176
Total	**40.0107**	**26.1626**	**142.6200**	**0.4051**	**29.7682**	**0.5634**	**30.3316**	**7.9566**	**0.5198**	**8.4765**		**29,398.5628**	**29,398.5628**	**0.8763**		**29,416.9643**

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.4180	18.2601	66.4944	0.1076	3.0685	0.3720	3.4405	0.8744	0.3422	1.2166		10,036.5336	10,036.5336	0.0735		10,038.0778
Worker	33.5484	7.4606	72.5847	0.2975	26.7005	0.1939	26.8944	7.0826	0.1799	7.2624		19,210.1729	19,210.1729	0.7847		19,226.6518
Total	38.9663	25.7207	139.0791	0.4051	29.7691	0.5659	30.3349	7.9570	0.5221	8.4791		29,246.7066	29,246.7066	0.8582		29,264.7296

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913
Total	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.4180	18.2601	66.4944	0.1076	3.0685	0.3720	3.4405	0.8744	0.3422	1.2166		10,036.5336	10,036.5336	0.0735		10,038.0778
Worker	33.5484	7.4606	72.5847	0.2975	26.7005	0.1939	26.8944	7.0826	0.1799	7.2624		19,210.1729	19,210.1729	0.7847		19,226.6518
Total	**38.9663**	**25.7207**	**139.0791**	**0.4051**	**29.7691**	**0.5659**	**30.3349**	**7.9570**	**0.5221**	**8.4791**		**29,246.7066**	**29,246.7066**	**0.8582**		**29,264.7296**

3.5 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3683	18.1039	65.2536	0.1077	3.0692	0.3722	3.4414	0.8747	0.3424	1.2171		10,042.8298	10,042.8298	0.0736		10,044.3762
Worker	32.5572	7.2177	70.3651	0.2975	26.7005	0.1954	26.8960	7.0826	0.1813	7.2639		19,072.9757	19,072.9757	0.7684		19,089.1127
Total	**37.9235**	**25.3217**	**135.6187**	**0.4051**	**29.7697**	**0.5676**	**30.3373**	**7.9572**	**0.5237**	**8.4810**		**29,115.8055**	**29,115.8055**	**0.8421**		**29,133.4889**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913
Total	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3663	18.1039	65.2536	0.1077	3.0692	0.3722	3.4414	0.8747	0.3424	1.2171		10,042.8298	10,042.8298	0.0736		10,044.3762
Worker	32.5572	7.2177	70.3651	0.2975	26.7005	0.1954	26.8960	7.0826	0.1813	7.2639		19,072.9757	19,072.9757	0.7684		19,089.1127
Total	37.9235	25.3217	135.6187	0.4051	29.7697	0.5676	30.3373	7.9572	0.5237	8.4810		29,115.8055	29,115.8055	0.8421		29,133.4889

3.5 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3443	17.9753	64.4628	0.1077	3.0699	0.3724	3.4422	0.8749	0.3426	1.2175		10,048.5946	10,048.5946	0.0737		10,050.1428
Worker	31.5687	6.9853	68.2345	0.2975	26.7005	0.1966	26.8972	7.0826	0.1824	7.2650		18,955.3980	18,955.3980	0.7528		18,971.2057
Total	36.9130	24.9606	132.6973	0.4052	29.7704	0.5690	30.3394	7.9575	0.5250	8.4825		29,003.9927	29,003.9927	0.8265		29,021.3485

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3602	12.3983	16.0371	0.0288		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913
Total	1.3602	12.3983	16.0371	0.0288		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3443	17.9753	64.4628	0.1077	3.0699	0.3724	3.4422	0.8749	0.3426	1.2175		10,048.5946	10,048.5946	0.0737		10,050.1428
Worker	31.5687	6.9853	68.2345	0.2975	26.7005	0.1966	26.8972	7.0826	0.1824	7.2650		18,955.3980	18,955.3980	0.7528		18,971.2057
Total	36.9130	24.9606	132.6973	0.4052	29.7704	0.5690	30.3394	7.9575	0.5250	8.4825		29,003.9927	29,003.9927	0.8265		29,021.3485

3.5 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3473	17.8586	64.2039	0.1078	3.0705	0.3726	3.4431	0.8752	0.3428	1.2179		10,054.5755	10,054.5755	0.0738		10,056.1257
Worker	30.6215	6.7745	66.3800	0.2975	26.7005	0.1976	26.8981	7.0826	0.1833	7.2659		18,855.9199	18,855.9199	0.7384		18,871.4262
Total	35.9688	24.6331	130.5840	0.4052	29.7710	0.5701	30.3412	7.9577	0.5261	8.4838		28,910.4954	28,910.4954	0.8122		28,927.5519

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128
Total	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3473	17.8586	64.2039	0.1078	3.0705	0.3726	3.4431	0.8752	0.3428	1.2179		10,054.5755	10,054.5755	0.0738		10,056.1257
Worker	30.6215	6.7745	66.3800	0.2975	26.7005	0.1976	26.8981	7.0826	0.1833	7.2659		18,855.9199	18,855.9199	0.7384		18,871.4262
Total	**35.9688**	**24.6331**	**130.5840**	**0.4052**	**29.7710**	**0.5701**	**30.3412**	**7.9577**	**0.5261**	**8.4838**		**28,910.4954**	**28,910.4954**	**0.8122**		**28,927.5519**

3.5 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3573	17.7650	63.9912	0.1078	3.0712	0.3730	3.4442	0.8755	0.3432	1.2186		10,061.3831	10,061.3831	0.0739		10,062.9354
Worker	29.7437	6.5780	64.6928	0.2975	26.7005	0.1981	26.8987	7.0826	0.1838	7.2664		18,772.7506	18,772.7506	0.7254		18,787.9835
Total	**35.1010**	**24.3430**	**128.6839**	**0.4053**	**29.7718**	**0.5711**	**30.3429**	**7.9580**	**0.5270**	**8.4850**		**28,834.1336**	**28,834.1336**	**0.7993**		**28,850.9189**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128
Total	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3573	17.7650	63.9912	0.1078	3.0712	0.3730	3.4442	0.8755	0.3432	1.2186		10,061.3831	10,061.3831	0.0739		10,062.9354
Worker	29.7437	6.5780	64.6928	0.2975	26.7005	0.1981	26.8987	7.0826	0.1838	7.2664		18,772.7506	18,772.7506	0.7254		18,787.9835
Total	35.1010	24.3430	128.6839	0.4053	29.7718	0.5711	30.3429	7.9580	0.5270	8.4850		28,834.1336	28,834.1336	0.7993		28,850.9189

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3564	17.6834	63.8086	0.1079	3.0720	0.3734	3.4454	0.8758	0.3435	1.2193		10,067.7538	10,067.7538	0.0740		10,069.3082
Worker	28.9410	6.4087	63.2563	0.2975	26.7005	0.1985	26.8991	7.0826	0.1842	7.2668		18,703.5428	18,703.5428	0.7139		18,718.5355
Total	**34.2973**	**24.0920**	**127.0649**	**0.4053**	**29.7726**	**0.5719**	**30.3445**	**7.9583**	**0.5277**	**8.4860**		**28,771.2967**	**28,771.2967**	**0.7880**		**28,787.8436**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128
Total	**1.3029**	**7.9106**	**16.1165**	**0.0308**		**0.1475**	**0.1475**		**0.1475**	**0.1475**	**0.0000**	**2,882.1833**	**2,882.1833**	**0.1157**		**2,884.6128**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3564	17.6834	63.8086	0.1079	3.0720	0.3734	3.4454	0.8758	0.3435	1.2193		10,067.7538	10,067.7538	0.0740		10,069.3082
Worker	28.9410	6.4087	63.2563	0.2975	26.7005	0.1985	26.8991	7.0826	0.1842	7.2668		18,703.5428	18,703.5428	0.7139		18,718.5355
Total	**34.2973**	**24.0920**	**127.0649**	**0.4053**	**29.7726**	**0.5719**	**30.3445**	**7.9583**	**0.5277**	**8.4860**		**28,771.2967**	**28,771.2967**	**0.7880**		**28,787.8436**

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3625	17.6080	63.6916	0.1079	3.0728	0.3737	3.4464	0.8761	0.3438	1.2199		10,073.6852	10,073.6852	0.0741		10,075.2411
Worker	28.2275	6.2696	62.0837	0.2975	26.7005	0.1988	26.8994	7.0828	0.1845	7.2670		18,646.3573	18,646.3573	0.7043		18,661.1481
Total	33.5899	23.8755	125.7753	0.4054	29.7733	0.5725	30.3458	7.9586	0.5283	8.4869		28,720.0425	28,720.0425	0.7784		28,736.3892

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128
Total	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3625	17.6060	63.8916	0.1079	3.0728	0.3737	3.4464	0.8761	0.3438	1.2199		10,073.6852	10,073.6852	0.0741		10,075.2411
Worker	28.2275	6.2696	62.0837	0.2975	26.7005	0.1988	26.8994	7.0826	0.1845	7.2670		18,646.3573	18,646.3573	0.7043		18,661.1481
Total	33.5899	23.8755	125.7753	0.4054	29.7733	0.5725	30.3458	7.9586	0.5283	8.4869		28,720.0425	28,720.0425	0.7784		28,736.3892

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3677	17.5377	63.5565	0.1080	3.0734	0.3739	3.4474	0.8763	0.3440	1.2203		10,079.4655	10,079.4655	0.0742		10,081.0228
Worker	27.3514	6.1500	60.9526	0.2974	26.7005	0.1989	26.8994	7.0826	0.1845	7.2671		18,597.9327	18,597.9327	0.6952		18,612.5312

Total	32.7190	23.6877	124.5091	0.4054	29.7740	0.5728	30.3468	7.9589	0.5285	8.4874		28,677.3981	28,677.3981	0.7693		28,693.5541

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3029	7.9108	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128
Total	1.3029	7.9108	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3677	17.5377	63.5565	0.1080	3.0734	0.3739	3.4474	0.8763	0.3440	1.2203		10,079.4655	10,079.4655	0.0742		10,081.0226
Worker	27.3514	6.1500	60.9526	0.2974	26.7005	0.1989	26.8994	7.0826	0.1845	7.2671		18,597.9327	18,597.9327	0.6952		18,612.5312
Total	32.7190	23.6877	124.5091	0.4054	29.7740	0.5728	30.3468	7.9589	0.5285	8.4874		28,677.3981	28,677.3981	0.7693		28,693.5541

3.5 Building Construction - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3605	17.4759	63.3975	0.1080	3.0741	0.3739	3.4480	0.8766	0.3440	1.2206		10,084.4810	10,084.4810	0.0742		10,086.0396
Worker	26.5805	6.0567	59.9832	0.2974	26.7005	0.1989	26.8994	7.0826	0.1845	7.2671		18,557.9381	18,557.9381	0.6873		18,572.3715
Total	31.9410	23.5325	123.3807	0.4055	29.7746	0.5728	30.3474	7.9592	0.5286	8.4877		28,642.4192	28,642.4192	0.7615		28,658.4111

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391
Total	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3605	17.4759	63.3975	0.1080	3.0741	0.3739	3.4480	0.8766	0.3440	1.2206		10,084.4810	10,084.4810	0.0742		10,086.0396

Worker	26.5805	6.0567	59.9832	0.2974	26.7005	0.1989	26.8994	7.0826	0.1845	7.2671		18,557.9381	18,557.9381	0.6873		18,572.3716
Total	**31.9410**	**23.5325**	**123.3807**	**0.4055**	**29.7746**	**0.5728**	**30.3474**	**7.9592**	**0.5286**	**8.4877**		**28,642.4192**	**28,642.4192**	**0.7615**		**28,658.4111**

3.5 Building Construction - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391

Total	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

3.5 Building Construction - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391
Total	**1.2112**	**7.1444**	**16.0774**	**0.0308**		**0.0900**	**0.0900**		**0.0900**	**0.0900**	**0.0000**	**2,882.1833**	**2,882.1833**	**0.1074**		**2,884.4391**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

3.5 Building Construction - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391
Total	**1.2112**	**7.1444**	**16.0774**	**0.0308**		**0.0900**	**0.0900**		**0.0900**	**0.0900**	**0.0000**	**2,882.1833**	**2,882.1833**	**0.1074**		**2,884.4391**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

3.5 Building Construction - 2039

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Off-Road	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391
Total	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

3.5 Building Construction - 2040

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091
Total	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1915	6.8763	16.0781	0.0308		0.0734	0.0734		0.0734	0.0734	0.0000	2,882.1837	2,882.1837	0.1037		2,884.3604
Total	**1.1915**	**6.8763**	**16.0781**	**0.0308**		**0.0734**	**0.0734**		**0.0734**	**0.0734**	**0.0000**	**2,882.1837**	**2,882.1837**	**0.1037**		**2,884.3604**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

3.5 Building Construction - 2041

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091
Total	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1915	6.8763	16.0781	0.0308		0.0734	0.0734		0.0734	0.0734	0.0000	2,882.1837	2,882.1837	0.1037		2,884.3604
Total	1.1915	6.8763	16.0781	0.0308		0.0734	0.0734		0.0734	0.0734	0.0000	2,882.1837	2,882.1837	0.1037		2,884.3604

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

3.5 Building Construction - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091
Total	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091

Unmitigated Construction *Off-Site*

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1915	6.8763	16.0781	0.0308		0.0734	0.0734		0.0734	0.0734	0.0000	2,882.1837	2,882.1837	0.1037		2,884.3604
Total	1.1915	6.8763	16.0781	0.0308		0.0734	0.0734		0.0734	0.0734	0.0000	2,882.1837	2,882.1837	0.1037		2,884.3604

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

3.6 Paving - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000

3.6 Paving - 2043

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					**0.0992**	**0.0000**	**0.0992**	**0.0243**	**0.0000**	**0.0243**			**0.0000**			**0.0000**

3.6 Paving - 2044

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9902**	**3.5998**	**15.4879**	**0.0275**		**0.1138**	**0.1138**		**0.1138**	**0.1138**		***2,599.9866***	***2,599.9866***	***0.0874***		**2,601.8224**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					**0.0992**	**0.0000**	**0.0992**	**0.0243**	**0.0000**	**0.0243**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000

3.7 Architectural Coating - 2044

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6561
Total	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6561

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000
Total					**4.6406**	**0.0000**	**4.6406**	**1.1391**	**0.0000**	**1.1391**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1148	0.7264	1.7907	2.9700e-003		7.4200e-003	7.4200e-003		7.4200e-003	7.4200e-003	0.0000	281.1898	281.1898	9.9000e-003		281.3977
Total	**0.1148**	**0.7264**	**1.7907**	**2.9700e-003**		**7.4200e-003**	**7.4200e-003**		**7.4200e-003**	**7.4200e-003**	**0.0000**	**281.1898**	**281.1898**	**9.9000e-003**		**281.3977**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000

Total					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000

3.7 Architectural Coating - 2045

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6561
Total	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6561

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000
Total					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1148	0.7264	1.7907	2.9700e-003		7.4200e-003	7.4200e-003		7.4200e-003	7.4200e-003	0.0000	281.1898	281.1898	9.9000e-003		281.3977
Total	0.1148	0.7264	1.7907	2.9700e-003		7.4200e-003	7.4200e-003		7.4200e-003	7.4200e-003	0.0000	281.1898	281.1898	9.9000e-003		281.3977

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000
Total					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	477.2714	378.6261	1,809.4196	2.5585	189.2868	5.0532	194.3400	50.5578	4.6359	55.1937		234,462.8372	234,462.8372	12.1350		234,717.6728
Unmitigated	477.9283	379.1376	1,811.2320	2.5624	189.5906	5.0607	194.6513	50.6389	4.6428	55.2817		234,826.9236	234,826.9236	12.1520		235,082.1155

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	32,126.25	34,905.00	29591.25	82,528,815	82,396,552
Total	32,126.25	34,905.00	29,591.25	82,528,815	82,396,552

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504217	0.068068	0.177511	0.150009	0.045572	0.006451	0.019525	0.014983	0.002306	0.002359	0.006212	0.000585	0.002203

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.1991	10.2472	4.3605	0.0654		0.8285	0.8285		0.8285	0.8285		13,081.5302	13,081.5302	0.2507	0.2398	13,161.1422
NaturalGas Unmitigated	1.4371	12.2809	5.2259	0.0784		0.9929	0.9929		0.9929	0.9929		15,677.7329	15,677.7329	0.3005	0.2874	15,773.1450

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	133261	1.4371	12.2809	5.2259	0.0784		0.9929	0.9929		0.9929	0.9929		15,677.7329	15,677.7329	0.3005	0.2874	15,773.1450
Total		1.4371	12.2809	5.2259	0.0784		0.9929	0.9929		0.9929	0.9929		15,677.7329	15,677.7329	0.3005	0.2874	15,773.1450

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	111.193	1.1991	10.2472	4.3605	0.0654		0.8285	0.8285		0.8285	0.8285		13,081.5302	13,081.5302	0.2507	0.2398	13,161.1422
Total		1.1991	10.2472	4.3605	0.0654		0.8285	0.8285		0.8285	0.8285		13,081.5302	13,081.5302	0.2507	0.2398	13,161.1422

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	126.6759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076
Unmitigated	134.4759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					

Architectural Coating	16.7146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	104.3250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	13.4363	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878		724.1925	724.1925	0.7722		740.4076
Total	134.4759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	16.7146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	96.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	13.4363	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878		724.1925	724.1925	0.7722		740.4076
Total	126.6759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

Elk Grove Housing Element

Sacramento County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	4,875.00	Dwelling Unit	353.50	4,875,000.00	15680

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2014
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Increased acreage and population to consistent with Project assumptions.

Land Use Change -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	128.29	353.50
tblLandUse	Population	13,016.00	15,680.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.8578	49.6113	37.1961	0.0414	0.1141	2.5280	2.6421	0.0303	2.3601	2.3904	0.0000	4,293.0882	4,293.0882	1.1323	0.0000	4,316.8671
2015	5.5481	56.9624	43.6021	0.0414	18.2032	3.0893	21.2925	9.9670	2.8422	12.8092	0.0000	4,261.0950	4,261.0950	1.2352	0.0000	4,287.0337
2016	6.7721	74.8858	50.1026	0.0637	18.2032	3.5854	21.1429	9.9670	3.2985	12.6715	0.0000	6,574.8668	6,574.8668	1.9427	0.0000	6,615.6637
2017	6.3867	69.6564	47.6691	0.0637	8.8255	3.3183	12.1438	3.6369	3.0528	6.6897	0.0000	6,466.9488	6,466.9488	1.9415	0.0000	6,507.7193
2018	54.0806	66.8572	211.6757	0.4764	29.7610	2.7891	31.9722	7.9539	2.5660	10.0188	0.0000	39,043.3721	39,043.3721	1.9406	0.0000	39,084.1250
2019	50.2426	60.7042	196.9366	0.4746	29.7617	1.9600	31.7217	7.9542	1.8302	9.7844	0.0000	37,793.7939	37,793.7939	1.7622	0.0000	37,830.8007
2020	46.4967	54.0935	182.2505	0.4743	29.7623	1.7349	31.4973	7.9544	1.6201	9.5745	0.0000	36,535.4929	36,535.4929	1.6930	0.0000	36,571.0452
2021	43.9437	47.4975	172.0447	0.4742	29.7632	1.5344	31.2976	7.9547	1.4324	9.3871	0.0000	36,126.8446	36,126.8446	1.6376	0.0000	36,161.2342
2022	42.0227	42.9008	164.4626	0.4742	29.7644	1.3793	31.1436	7.9552	1.2872	9.2424	0.0000	35,771.4486	35,771.4486	1.5938	0.0000	35,804.9192
2023	40.1554	39.3536	157.1337	0.4741	29.7654	1.2482	31.0137	7.9556	1.1645	9.1201	0.0000	35,450.1441	35,450.1441	1.5513	0.0000	35,482.7204
2024	38.7097	37.8683	151.7349	0.4742	29.7666	1.1652	30.9318	7.9560	1.0861	9.0422	0.0000	35,180.1931	35,180.1931	1.5187	0.0000	35,212.0851
2025	37.4606	36.4205	147.1983	0.4742	29.7674	1.0826	30.8500	7.9563	1.0084	8.9647	0.0000	34,944.6625	34,944.6625	1.4911	0.0000	34,975.9759
2026	36.4587	35.9792	143.5032	0.4743	29.7682	1.0848	30.8530	7.9566	1.0104	8.9670	0.0000	34,744.6653	34,744.6653	1.4709	0.0000	34,775.5546
2027	35.5243	35.6079	140.3199	0.4744	29.7691	1.0872	30.8563	7.9570	1.0127	8.9696	0.0000	34,572.5298	34,572.5298	1.4529	0.0000	34,603.0405
2028	34.5987	35.2728	137.4028	0.4744	29.7697	1.0890	30.8587	7.9572	1.0143	8.9715	0.0000	34,424.6362	34,424.6362	1.4367	0.0000	34,454.8073
2029	33.6881	34.9705	134.7137	0.4745	29.7704	1.0904	30.8608	7.9575	1.0156	8.9731	0.0000	34,298.7648	34,298.7648	1.4211	0.0000	34,328.6082
2030	32.7684	30.2043	132.5975	0.4785	29.7710	0.7141	30.4852	7.9577	0.6704	8.6281	0.0000	34,532.5814	34,532.5814	0.9251	0.0000	34,552.0091
2031	31.9725	29.9630	130.6110	0.4786	29.7718	0.7151	30.4869	7.9580	0.6713	8.6293	0.0000	34,446.4135	34,446.4135	0.9122	0.0000	34,465.5699
2032	31.2355	29.7535	128.9156	0.4787	29.7726	0.7159	30.4885	7.9583	0.6720	8.6304	0.0000	34,375.4293	34,375.4293	0.9009	0.0000	34,394.3474
2033	30.5955	29.5723	127.5483	0.4787	29.7733	0.7165	30.4898	7.9586	0.6726	8.6312	0.0000	34,317.3247	34,317.3247	0.8913	0.0000	34,336.0425
2034	29.8370	29.4143	126.2083	0.4788	29.7740	0.7168	30.4908	7.9589	0.6729	8.6318	0.0000	34,268.9355	34,268.9355	0.8822	0.0000	34,287.4624
2035	29.0682	28.5166	124.9898	0.4788	29.7746	0.6593	30.4339	7.9592	0.6153	8.5745	0.0000	34,229.0248	34,229.0248	0.8661	0.0000	34,247.2138
2036	1.2123	7.1510	16.0922	0.0308	25.4417	0.0901	25.5318	6.2448	0.0901	6.3348	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2037	1.2123	7.1510	16.0922	0.0308	25.4417	0.0901	25.5318	6.2448	0.0901	6.3348	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878

2038	1.2123	7.1510	16.0922	0.0308	25.4417	0.0901	25.5318	6.2448	0.0901	6.3348	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2039	1.2123	7.1510	16.0922	0.0308	25.4417	0.0901	25.5318	6.2448	0.0901	6.3348	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2040	1.1926	6.8826	16.0929	0.0308	25.4417	0.0734	25.5152	6.2448	0.0734	6.3182	0.0000	2,884.8303	2,884.8303	0.1038	0.0000	2,887.0091
2041	1.1926	6.8826	16.0929	0.0308	25.4417	0.0734	25.5152	6.2448	0.0734	6.3182	0.0000	2,884.8303	2,884.8303	0.1038	0.0000	2,887.0091
2042	1.1926	6.8826	16.0929	0.0308	25.4417	0.1138	25.5152	6.2448	0.1138	6.3182	0.0000	2,884.8303	2,884.8303	0.1038	0.0000	2,887.0091
2043	0.9902	3.5998	15.4879	0.0275	0.0992	0.1138	0.2130	0.0243	0.1138	0.1381	0.0000	2,599.9866	2,599.9866	0.0874	0.0000	2,601.8224
2044	0.9902	3.5998	15.4879	0.0275	4.6406	0.1138	4.6460	1.1391	0.1138	1.1465	0.0000	2,599.9866	2,599.9866	0.0874	0.0000	2,601.8224
2045	0.1149	0.7270	1.7923	2.9700e-003	4.6406	7.4300e-003	4.6480	1.1391	7.4300e-003	1.1465	0.0000	281.4481	281.4481	9.9000e-003	0.0000	281.6561
Total	**712.9256**	**1,013.2441**	**3,034.2324**	**9.0494**	**768.6451**	**34.8598**	**802.1347**	**212.8365**	**32.4317**	**244.0264**	**0.0000**	**682,327.4881**	**682,327.4881**	**31.5256**	**0.0000**	**682,989.5246**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.8536	49.5659	37.1628	0.0413	0.1141	2.5257	2.6398	0.0303	2.3580	2.3882	0.0000	4,289.2679	4,289.2679	1.1313	0.0000	4,313.0251
2015	5.5433	56.9102	43.5630	0.0413	7.1828	3.0865	10.2693	3.9093	2.8396	6.7489	0.0000	4,257.3227	4,257.3227	1.2341	0.0000	4,283.2377
2016	6.7662	74.8172	50.0575	0.0636	7.1828	3.5821	10.1198	3.9093	3.2955	6.6113	0.0000	6,568.9814	6,568.9814	1.9409	0.0000	6,609.7410
2017	6.3611	69.5926	47.6261	0.0636	3.5347	3.3152	6.8500	1.4430	3.0500	4.4930	0.0000	6,461.1567	6,461.1567	1.9397	0.0000	6,501.8899
2018	54.0781	66.8359	211.6596	0.4764	29.7610	2.7865	31.9709	7.9539	2.5636	10.0175	0.0000	39,040.9777	39,040.9777	1.9388	0.0000	39,081.6933
2019	50.2404	60.6850	196.9209	0.4745	29.7617	1.9588	31.7206	7.9542	1.8291	9.7833	0.0000	37,791.4262	37,791.4262	1.7617	0.0000	37,828.4209
2020	46.4948	54.0760	182.2351	0.4743	29.7623	1.7339	31.4963	7.9544	1.6191	9.5735	0.0000	36,533.1603	36,533.1603	1.6924	0.0000	36,568.7007
2021	43.9420	47.4816	172.0295	0.4741	29.7632	1.5335	31.2967	7.9547	1.4316	9.3863	0.0000	36,124.5118	36,124.5118	1.6370	0.0000	36,158.8896
2022	42.0211	42.8865	164.4476	0.4741	29.7644	1.3785	31.1429	7.9552	1.2865	9.2417	0.0000	35,769.1149	35,769.1149	1.5933	0.0000	35,802.5737
2023	40.1539	39.3404	157.1189	0.4741	29.7654	1.2476	31.0130	7.9556	1.1639	9.1195	0.0000	35,447.8096	35,447.8096	1.5507	0.0000	35,480.3742
2024	38.7083	37.8560	151.7201	0.4741	29.7666	1.1647	30.9313	7.9560	1.0856	9.0416	0.0000	35,177.8581	35,177.8581	1.5181	0.0000	35,209.7385
2025	37.4593	36.4091	147.1836	0.4742	29.7674	1.0822	30.8496	7.9563	1.0080	8.9643	0.0000	34,942.3268	34,942.3268	1.4906	0.0000	34,973.6286
2026	36.4574	35.9678	143.4885	0.4743	29.7682	1.0843	30.8525	7.9566	1.0099	8.9666	0.0000	34,742.3296	34,742.3296	1.4704	0.0000	34,773.2074

2027	35.5230	35.5965	140.3052	0.4743	29.7691	1.0867	30.8558	7.9570	1.0122	8.9692	0.0000	34,570.1941	34,570.1941	1.4523	0.0000	34,600.6933
2028	34.5975	35.2614	137.3881	0.4744	29.7697	1.0865	30.8562	7.9572	1.0138	8.9711	0.0000	34,422.3005	34,422.3005	1.4362	0.0000	34,452.4600
2029	33.6866	34.9592	134.6990	0.4745	29.7704	1.0899	30.8603	7.9575	1.0151	8.9726	0.0000	34,296.4291	34,296.4291	1.4206	0.0000	34,326.2610
2030	32.7672	30.1970	132.5827	0.4785	29.7710	0.7140	30.4850	7.9577	0.6702	8.6280	0.0000	34,529.9347	34,529.9347	0.9250	0.0000	34,549.3602
2031	31.9713	29.9558	130.5962	0.4786	29.7718	0.7150	30.4868	7.9580	0.6711	8.6292	0.0000	34,443.7668	34,443.7668	0.9121	0.0000	34,462.9210
2032	31.2343	29.7463	128.9008	0.4786	29.7726	0.7158	30.4883	7.9583	0.6719	8.6302	0.0000	34,372.7827	34,372.7827	0.9008	0.0000	34,391.6985
2033	30.5944	29.5650	127.5335	0.4787	29.7733	0.7164	30.4897	7.9586	0.6724	8.6311	0.0000	34,314.6781	34,314.6781	0.8912	0.0000	34,333.3935
2034	29.8358	29.4070	126.1935	0.4788	29.7740	0.7167	30.4907	7.9589	0.6727	8.6316	0.0000	34,266.2888	34,266.2888	0.8821	0.0000	34,284.8135
2035	29.0671	28.5100	124.9750	0.4788	29.7746	0.6592	30.4338	7.9592	0.6153	8.5744	0.0000	34,226.3781	34,226.3781	0.8660	0.0000	34,244.5650
2036	1.2112	7.1444	16.0774	0.0308	25.4417	0.0900	25.5317	6.2448	0.0900	6.3348	0.0000	2,882.1833	2,882.1833	0.1074	0.0000	2,884.4391
2037	1.2112	7.1444	16.0774	0.0308	25.4417	0.0900	25.5317	6.2448	0.0900	6.3348	0.0000	2,882.1833	2,882.1833	0.1074	0.0000	2,884.4391
2038	1.2112	7.1444	16.0774	0.0308	25.4417	0.0900	25.5317	6.2448	0.0900	6.3348	0.0000	2,882.1833	2,882.1833	0.1074	0.0000	2,884.4391
2039	1.2112	7.1444	16.0774	0.0308	25.4417	0.0900	25.5317	6.2448	0.0900	6.3348	0.0000	2,882.1833	2,882.1833	0.1074	0.0000	2,884.4391
2040	1.1915	6.8763	16.0781	0.0308	25.4417	0.0734	25.5151	6.2448	0.0734	6.3182	0.0000	2,882.1837	2,882.1837	0.1037	0.0000	2,884.3604
2041	1.1915	6.8763	16.0781	0.0308	25.4417	0.0734	25.5151	6.2448	0.0734	6.3182	0.0000	2,882.1837	2,882.1837	0.1037	0.0000	2,884.3604
2042	1.1915	6.8763	16.0781	0.0308	25.4417	0.1137	25.5151	6.2448	0.1137	6.3182	0.0000	2,882.1837	2,882.1837	0.1037	0.0000	2,884.3604
2043	0.9893	3.5965	15.4737	0.0274	0.0992	0.1137	0.2128	0.0243	0.1137	0.1380	0.0000	2,597.6013	2,597.6013	0.0873	0.0000	2,599.4354
2044	0.9893	3.5965	15.4737	0.0274	4.6406	0.1137	4.6480	1.1391	0.1137	1.1465	0.0000	2,597.6013	2,597.6013	0.0873	0.0000	2,599.4354
2045	0.1148	0.7264	1.7907	2.9700e-003	4.6406	7.4200e-003	4.6480	1.1391	7.4200e-003	1.1465	0.0000	281.1898	281.1898	9.9000e-003	0.0000	281.3977
Total	**712.8694**	**1,012.7480**	**3,033.6692**	**9.0485**	**741.3135**	**34.8368**	**774.7820**	**198.5272**	**32.4102**	**229.6974**	**0.0000**	**682,240.6726**	**682,240.6726**	**31.5105**	**0.0000**	**682,902.3926**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.01	0.05	0.02	0.01	3.56	0.07	3.41	6.72	0.07	5.87	0.00	0.01	0.01	0.05	0.00	0.01

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Area	134.4759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076
Energy	1.4371	12.2809	5.2259	0.0784		0.9929	0.9929		0.9929	0.9929		15,677.7329	15,677.7329	0.3005	0.2874	15,773.1450
Mobile	437.5580	332.0206	1,776.4105	2.8406	189.5906	5.0164	194.6070	50.6389	4.6020	55.2410		259,876.0070	259,876.0070	12.1456		260,131.0652
Total	573.4710	349.1852	2,193.6545	2.9402	189.5906	8.1971	197.7877	50.6389	7.7827	58.4216	0.0000	276,277.9324	276,277.9324	13.2183	0.2874	276,644.6177

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	126.6759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076
Energy	1.1991	10.2472	4.3605	0.0654		0.8285	0.8285		0.8285	0.8285		13,081.5302	13,081.5302	0.2507	0.2398	13,161.1422
Mobile	436.9889	331.5763	1,774.2146	2.8362	189.2868	5.0090	194.2958	50.5578	4.5952	55.1530		259,472.1612	259,472.1612	12.1287		259,726.8629
Total	564.8639	346.7072	2,190.5933	2.9228	189.2868	8.0252	197.3120	50.5578	7.6115	58.1692	0.0000	273,277.8839	273,277.8839	13.1515	0.2398	273,628.4127

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	1.50	0.71	0.14	0.59	0.16	2.10	0.24	0.16	2.20	0.43	0.00	1.09	1.09	0.50	16.56	1.09

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2014	7/14/2015	5	400	
2	Site Preparation	Site Preparation	7/15/2015	6/14/2016	5	240	
3	Grading	Grading	6/15/2016	10/30/2018	5	620	
4	Building Construction	Building Construction	10/31/2018	8/5/2042	5	6200	
5	Paving	Paving	8/6/2042	4/12/2044	5	440	
6	Architectural Coating	Architectural Coating	4/13/2044	12/19/2045	5	440	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1550

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,510.00	521.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	702.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593		4,164.0858	4,164.0858	1.1253		4,187.7164
Total	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593		4,164.0858	4,164.0858	1.1253		4,187.7164

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2616	0.0683	0.9088	1.4600e-003	0.1141	9.5000e-004	0.1151	0.0303	8.6000e-004	0.0311		129.0023	129.0023	7.0600e-003		129.1507
Total	0.2616	0.0683	0.9088	1.4600e-003	0.1141	9.5000e-004	0.1151	0.0303	8.6000e-004	0.0311		129.0023	129.0023	7.0600e-003		129.1507

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5920	49.4975	36.2540	0.0399		2.5247	2.5247		2.3571	2.3571	0.0000	4,160.2655	4,160.2655	1.1242		4,183.8744

Total	4.5920	49.4975	36.2540	0.0399		2.5247	2.5247		2.3571	2.3571	0.0000	4,160.2655	4,160.2655	1.1242		4,183.8744

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2616	0.0683	0.9088	1.4600e-003	0.1141	9.5000e-004	0.1151	0.0303	8.6000e-004	0.0311		129.0023	129.0023	7.0600e-003		129.1507
Total	0.2616	0.0683	0.9088	1.4600e-003	0.1141	9.5000e-004	0.1151	0.0303	8.6000e-004	0.0311		129.0023	129.0023	7.0600e-003		129.1507

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2393	0.0606	0.8086	1.4600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		124.4588	124.4588	6.3700e-003		124.5927
Total	**0.2393**	**0.0606**	**0.8086**	**1.4600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**124.4588**	**124.4588**	**6.3700e-003**		**124.5927**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5041	48.3186	36.0407	0.0399		2.4486	2.4486		2.2837	2.2837	0.0000	4,123.4069	4,123.4069	1.1178		4,146.8806
Total	**4.5041**	**48.3186**	**36.0407**	**0.0399**		**2.4486**	**2.4486**		**2.2837**	**2.2837**	**0.0000**	**4,123.4069**	**4,123.4069**	**1.1178**		**4,146.8806**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2393	0.0606	0.8086	1.4600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		124.4588	124.4588	6.3700e-003		124.5927
Total	**0.2393**	**0.0606**	**0.8086**	**1.4600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**124.4588**	**124.4588**	**6.3700e-003**		**124.5927**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2872	0.0727	0.9703	1.7500e-003	0.1369	1.0600e-003	0.1380	0.0363	9.7000e-004	0.0373		149.3506	149.3506	7.6500e-003		149.5112
Total	**0.2872**	**0.0727**	**0.9703**	**1.7500e-003**	**0.1369**	**1.0600e-003**	**0.1380**	**0.0363**	**9.7000e-004**	**0.0373**		**149.3506**	**149.3506**	**7.6500e-003**		**149.5112**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	5.2561	56.8375	42.5927	0.0391		3.0855	3.0855		2.8386	2.8386	0.0000	4,107.9721	4,107.9721	1.2264		4,133.7265
Total	**5.2561**	**56.8375**	**42.5927**	**0.0391**	**7.0458**	**3.0855**	**10.1313**	**3.8730**	**2.8386**	**6.7116**	**0.0000**	**4,107.9721**	**4,107.9721**	**1.2264**		**4,133.7265**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2872	0.0727	0.9703	1.7500e-003	0.1369	1.0600e-003	0.1380	0.0363	9.7000e-004	0.0373		149.3506	149.3506	7.6500e-003		149.5112
Total	**0.2872**	**0.0727**	**0.9703**	**1.7500e-003**	**0.1369**	**1.0600e-003**	**0.1380**	**0.0363**	**9.7000e-004**	**0.0373**		**149.3506**	**149.3506**	**7.6500e-003**		**149.5112**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2634	0.0649	0.8686	1.7500e-003	0.1369	1.0100e-003	0.1379	0.0363	9.2000e-004	0.0373		143.8975	143.8975	6.9500e-003		144.0434
Total	**0.2634**	**0.0649**	**0.8686**	**1.7500e-003**	**0.1369**	**1.0100e-003**	**0.1379**	**0.0363**	**9.2000e-004**	**0.0373**		**143.8975**	**143.8975**	**6.9500e-003**		**144.0434**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	5.0724	54.5822	41.0676	0.0391		2.9360	2.9360		2.7011	2.7011	0.0000	4,061.2758	4,061.2758	1.2250		4,087.0014
Total	**5.0724**	**54.5822**	**41.0676**	**0.0391**	**7.0458**	**2.9360**	**9.9818**	**3.8730**	**2.7011**	**6.5741**	**0.0000**	**4,061.2758**	**4,061.2758**	**1.2250**		**4,087.0014**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2634	0.0649	0.8686	1.7500e-003	0.1369	1.0100e-003	0.1379	0.0363	9.2000e-004	0.0373		143.8975	143.8975	6.9500e-003		144.0434
Total	**0.2634**	**0.0649**	**0.8686**	**1.7500e-003**	**0.1369**	**1.0100e-003**	**0.1379**	**0.0363**	**9.2000e-004**	**0.0373**		**143.8975**	**143.8975**	**6.9500e-003**		**144.0434**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**8.6733**	**3.5842**	**12.2576**	**3.5965**	**3.2975**	**6.8940**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2927	0.0721	0.9651	1.9500e-003	0.1521	1.1200e-003	0.1533	0.0404	1.0300e-003	0.0414		159.8861	159.8861	7.7200e-003		160.0483
Total	**0.2927**	**0.0721**	**0.9651**	**1.9500e-003**	**0.1521**	**1.1200e-003**	**0.1533**	**0.0404**	**1.0300e-003**	**0.0414**		**159.8861**	**159.8861**	**7.7200e-003**		**160.0483**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	6.4735	74.7451	49.0923	0.0617		3.5810	3.5810		3.2945	3.2945	0.0000	6,409.0953	6,409.0953	1.9332		6,449.6927
Total	**6.4735**	**74.7451**	**49.0923**	**0.0617**	**3.3826**	**3.5810**	**6.9636**	**1.4026**	**3.2945**	**4.6971**	**0.0000**	**6,409.0953**	**6,409.0953**	**1.9332**		**6,449.6927**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2927	0.0721	0.9651	1.9500e-003	0.1521	1.1200e-003	0.1533	0.0404	1.0300e-003	0.0414		159.8861	159.8861	7.7200e-003		160.0483
Total	**0.2927**	**0.0721**	**0.9651**	**1.9500e-003**	**0.1521**	**1.1200e-003**	**0.1533**	**0.0404**	**1.0300e-003**	**0.0414**		**159.8861**	**159.8861**	**7.7200e-003**		**160.0483**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	6.0991	69.5920	46.8050	0.0617	8.6733	3.3172	11.9905	3.5965	3.0518	6.6483		6,313.3690	6,313.3690	1.9344		6,353.9915

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2675	0.0645	0.8640	1.9500e-003	0.1521	1.0800e-003	0.1532	0.0404	1.0000e-003	0.0414		153.5798	153.5798	7.0500e-003		153.7278
Total	0.2675	0.0645	0.8640	1.9500e-003	0.1521	1.0800e-003	0.1532	0.0404	1.0000e-003	0.0414		153.5798	153.5798	7.0500e-003		153.7278

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	6.0935	69.5281	46.7621	0.0617		3.3142	3.3142		3.0490	3.0490	0.0000	6,307.5768	6,307.5768	1.9326		6,348.1621
Total	6.0935	69.5281	46.7621	0.0617	3.3826	3.3142	6.6968	1.4026	3.0490	4.4517	0.0000	6,307.5768	6,307.5768	1.9326		6,348.1621

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2675	0.0645	0.8640	1.9500e-003	0.1521	1.0800e-003	0.1532	0.0404	1.0000e-003	0.0414		153.5798	153.5798	7.0500e-003		153.7278
Total	**0.2675**	**0.0645**	**0.8640**	**1.9500e-003**	**0.1521**	**1.0800e-003**	**0.1532**	**0.0404**	**1.0000e-003**	**0.0414**		**153.5798**	**153.5798**	**7.0500e-003**		**153.7278**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650		6,212.8042	6,212.8042	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**8.6733**	**2.7880**	**11.4614**	**3.5965**	**2.5650**	**6.1615**		**6,212.8042**	**6,212.8042**	**1.9341**		**6,253.4209**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2457	0.0581	0.7793	1.9400e-003	0.1521	1.0600e-003	0.1532	0.0404	9.8000e-004	0.0413		147.7850	147.7850	6.4800e-003		147.9211
Total	**0.2457**	**0.0581**	**0.7793**	**1.9400e-003**	**0.1521**	**1.0600e-003**	**0.1532**	**0.0404**	**9.8000e-004**	**0.0413**		**147.7850**	**147.7850**	**6.4800e-003**		**147.9211**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	5.2847	59.4792	42.2680	0.0617		2.7855	2.7855		2.5626	2.5626	0.0000	6,207.1042	6,207.1042	1.9324		6,247.6837
Total	5.2847	59.4792	42.2680	0.0617	3.3826	2.7855	6.1681	1.4026	2.5626	3.9653	0.0000	6,207.1042	6,207.1042	1.9324		6,247.6837

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2457	0.0581	0.7793	1.9400e-003	0.1521	1.0600e-003	0.1532	0.0404	9.8000e-004	0.0413		147.7850	147.7850	6.4800e-003		147.9211
Total	0.2457	0.0581	0.7793	1.9400e-003	0.1521	1.0600e-003	0.1532	0.0404	9.8000e-004	0.0413		147.7850	147.7850	6.4800e-003		147.9211

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.2873	33.4054	57.3724	0.1083	3.0604	0.5312	3.5916	0.8713	0.4882	1.3595		10,497.1707	10,497.1707	0.0778		10,498.8037
Worker	43.1246	10.1909	136.7706	0.3414	26.7005	0.1858	26.8863	7.0826	0.1720	7.2545		25,936.2625	25,936.2625	1.1379		25,960.1592
Total	**51.4119**	**43.5963**	**194.1430**	**0.4496**	**29.7609**	**0.7170**	**30.4779**	**7.9539**	**0.6602**	**8.6140**		**36,433.4332**	**36,433.4332**	**1.2157**		**36,458.9629**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6662	23.2395	17.5166	0.0268		1.4929	1.4929		1.4035	1.4035	0.0000	2,607.5445	2,607.5445	0.6381		2,620.9449
Total	**2.6662**	**23.2395**	**17.5166**	**0.0268**		**1.4929**	**1.4929**		**1.4035**	**1.4035**	**0.0000**	**2,607.5445**	**2,607.5445**	**0.6381**		**2,620.9449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.2873	33.4054	57.3724	0.1083	3.0604	0.5312	3.5916	0.8713	0.4882	1.3595		10,497.1707	10,497.1707	0.0778		10,498.8037
Worker	43.1246	10.1909	136.7706	0.3414	26.7005	0.1858	26.8863	7.0826	0.1720	7.2545		25,936.2625	25,936.2625	1.1379		25,960.1592
Total	**51.4119**	**43.5963**	**194.1430**	**0.4496**	**29.7609**	**0.7170**	**30.4779**	**7.9539**	**0.6602**	**8.6140**		**36,433.4332**	**36,433.4332**	**1.2157**		**36,458.9629**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3738	30.4139	53.4372	0.1082	3.0612	0.4915	3.5526	0.8716	0.4518	1.3234		10,327.1395	10,327.1395	0.0757		10,328.7296
Worker	40.5172	9.3253	126.3791	0.3396	26.7005	0.1835	26.8841	7.0826	0.1701	7.2527		24,885.8926	24,885.8926	1.0586		24,908.1232
Total	47.8910	39.7392	179.8163	0.4478	29.7617	0.6750	30.4367	7.9542	0.6219	8.5761		35,213.0321	35,213.0321	1.1343		35,236.8528

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3495	20.9458	17.1046	0.0268		1.2839	1.2839		1.2072	1.2072	0.0000	2,578.3941	2,578.3941	0.6273		2,591.5681
Total	2.3495	20.9458	17.1046	0.0268		1.2839	1.2839		1.2072	1.2072	0.0000	2,578.3941	2,578.3941	0.6273		2,591.5681

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3738	30.4139	53.4372	0.1082	3.0612	0.4915	3.5526	0.8716	0.4518	1.3234		10,327.1395	10,327.1395	0.0757		10,328.7296
Worker	40.5172	9.3253	126.3791	0.3396	26.7005	0.1835	26.8841	7.0826	0.1701	7.2527		24,885.8926	24,885.8926	1.0586		24,908.1232
Total	47.8910	39.7392	179.8163	0.4478	29.7617	0.6750	30.4367	7.9542	0.6219	8.5761		35,213.0321	35,213.0321	1.1343		35,236.8528

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9339	26.3678	47.6681	0.1080	3.0618	0.4365	3.5003	0.8718	0.4033	1.2752		10,091.3472	10,091.3472	0.0730		10,092.8799
Worker	38.4516	8.6418	117.7739	0.3395	26.7005	0.1836	26.8842	7.0826	0.1703	7.2528		23,901.6658	23,901.6658	1.0005		23,922.6773
Total	44.3855	35.0096	165.4420	0.4475	29.7623	0.6221	30.3844	7.9544	0.5736	8.5280		33,993.0130	33,993.0130	1.0735		34,015.5572

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1093	19.0664	16.7930	0.0268		1.1118	1.1118		1.0455	1.0455	0.0000	2,540.1473	2,540.1473	0.6189		2,553.1435
Total	2.1093	19.0664	16.7930	0.0268		1.1118	1.1118		1.0455	1.0455	0.0000	2,540.1473	2,540.1473	0.6189		2,553.1435

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9339	26.3678	47.6681	0.1080	3.0618	0.4385	3.5003	0.8718	0.4033	1.2752		10,091.3472	10,091.3472	0.0730		10,092.8799
Worker	38.4516	8.6418	117.7739	0.3395	26.7005	0.1836	26.8842	7.0826	0.1703	7.2528		23,901.6658	23,901.6658	1.0005		23,922.6773
Total	44.3855	35.0096	165.4420	0.4475	29.7623	0.6221	30.3844	7.9544	0.5736	8.5280		33,993.0130	33,993.0130	1.0735		34,015.5572

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3423	22.0813	44.8161	0.1079	3.0626	0.3950	3.4576	0.8722	0.3634	1.2355		10,085.7430	10,085.7430	0.0725		10,087.2644
Worker	36.7083	8.0760	110.6910	0.3395	26.7005	0.1845	26.8851	7.0826	0.1712	7.2537		23,498.3199	23,498.3199	0.9526		23,518.3237
Total	42.0506	30.1573	155.5071	0.4474	29.7632	0.5795	30.3427	7.9547	0.5345	8.4893		33,584.0629	33,584.0629	1.0250		33,605.5881

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8914	17.3244	16.5225	0.0268		0.9540	0.9540		0.8970	0.8970	0.0000	2,540.4489	2,540.4489	0.6120		2,553.3015
Total	1.8914	17.3244	16.5225	0.0268		0.9540	0.9540		0.8970	0.8970	0.0000	2,540.4489	2,540.4489	0.6120		2,553.3015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.3423	22.0813	44.8161	0.1079	3.0626	0.3950	3.4576	0.8722	0.3634	1.2355		10,085.7430	10,085.7430	0.0725		10,087.2644
Worker	36.7083	8.0760	110.6910	0.3395	26.7005	0.1845	26.8851	7.0826	0.1712	7.2537		23,498.3199	23,498.3199	0.9526		23,518.3237

Total	42.0506	30.1573	155.5071	0.4474	29.7632	0.5795	30.3427	7.9547	0.5345	8.4893		33,584.0629	33,584.0629	1.0250		33,605.5881

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.1959	19.7737	43.6772	0.1079	3.0638	0.3879	3.4517	0.8726	0.3569	1.2295		10,089.7921	10,089.7921	0.0736		10,091.3372
Worker	35.1276	7.5907	104.4578	0.3395	26.7005	0.1856	26.8862	7.0826	0.1722	7.2548		23,137.9068	23,137.9068	0.9117		23,157.0533
Total	40.3235	27.3644	148.1350	0.4473	29.7644	0.5736	30.3379	7.9552	0.5291	8.4843		33,227.6989	33,227.6989	0.9853		33,248.3906

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6976	15.5221	16.3126	0.0268		0.8050	0.8050		0.7574	0.7574	0.0000	2,541.4159	2,541.4159	0.6080		2,554.1832
Total	1.6976	15.5221	16.3126	0.0268		0.8050	0.8050		0.7574	0.7574	0.0000	2,541.4159	2,541.4159	0.6080		2,554.1832

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.1959	19.7737	43.6772	0.1079	3.0638	0.3879	3.4517	0.8726	0.3569	1.2295		10,089.7921	10,089.7921	0.0736		10,091.3372
Worker	35.1276	7.5907	104.4578	0.3395	26.7005	0.1856	26.8862	7.0826	0.1722	7.2548		23,137.9068	23,137.9068	0.9117		23,157.0533
Total	**40.3235**	**27.3644**	**148.1350**	**0.4473**	**29.7644**	**0.5736**	**30.3379**	**7.9552**	**0.5291**	**8.4843**		**33,227.6989**	**33,227.6989**	**0.9853**		**33,248.3906**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.8856	17.8663	41.9135	0.1078	3.0649	0.3646	3.4295	0.8730	0.3354	1.2084		10,088.2683	10,088.2683	0.0698		10,089.7345

Worker	33.7036	7.1746	99.0110	0.3394	26.7005	0.1869	26.8875	7.0826	0.1734	7.2560		22,817.2497	22,817.2497	0.8770		22,835.6668
Total	38.5892	25.0409	140.9245	0.4473	29.7654	0.5515	30.3169	7.9556	0.5088	8.4644		32,905.5179	32,905.5179	0.9468		32,925.4013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5647	14.2995	16.1944	0.0268		0.6961	0.6961		0.6551	0.6551	0.0000	2,542.2917	2,542.2917	0.6039		2,554.9729
Total	1.5647	14.2995	16.1944	0.0268		0.6961	0.6961		0.6551	0.6551	0.0000	2,542.2917	2,542.2917	0.6039		2,554.9729

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.8856	17.8663	41.9135	0.1078	3.0649	0.3646	3.4295	0.8730	0.3354	1.2084		10,088.2683	10,088.2683	0.0698		10,089.7345
Worker	33.7036	7.1746	99.0110	0.3394	26.7005	0.1869	26.8875	7.0826	0.1734	7.2560		22,817.2497	22,817.2497	0.8770		22,835.6668
Total	38.5892	25.0409	140.9245	0.4473	29.7654	0.5515	30.3169	7.9556	0.5088	8.4644		32,905.5179	32,905.5179	0.9468		32,925.4013

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4853	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349

Total	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.8222	17.6686	41.0860	0.1079	3.0661	0.3863	3.4524	0.8735	0.3370	1.2105		10,099.8928	10,099.8928	0.0701		10,101.3656
Worker	32.4222	6.8222	94.5137	0.3394	26.7005	0.1884	26.8889	7.0826	0.1747	7.2573		22,535.1849	22,535.1849	0.8476		22,552.9847
Total	37.2444	24.4909	135.6017	0.4473	29.7666	0.5747	30.3213	7.9560	0.5118	8.4678		32,635.0777	32,635.0777	0.9177		32,654.3502

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4639	13.3651	16.1184	0.0268		0.6100	0.6100		0.5738	0.5738	0.0000	2,542.7804	2,542.7804	0.6004		2,555.3883
Total	1.4639	13.3651	16.1184	0.0268		0.6100	0.6100		0.5738	0.5738	0.0000	2,542.7804	2,542.7804	0.6004		2,555.3883

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	4.8222	17.6886	41.0880	0.1079	3.0661	0.3663	3.4324	0.8735	0.3370	1.2105		10,099.8928	10,099.8928	0.0701		10,101.3656
Worker	32.4222	6.8222	94.5137	0.3394	26.7005	0.1884	26.8889	7.0826	0.1747	7.2573		22,535.1849	22,535.1849	0.8476		22,552.9847
Total	**37.2444**	**24.4909**	**135.6017**	**0.4473**	**29.7666**	**0.5547**	**30.3213**	**7.9560**	**0.5118**	**8.4678**		**32,635.0777**	**32,635.0777**	**0.9177**		**32,654.3502**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7620	17.4817	40.3261	0.1080	3.0669	0.3675	3.4344	0.8738	0.3381	1.2119		10,108.5496	10,108.5496	0.0704		10,110.0274
Worker	31.3371	6.5291	90.8204	0.3394	26.7005	0.1901	26.8906	7.0826	0.1764	7.2589		22,290.2224	22,290.2224	0.8232		22,307.5099
Total	**36.0991**	**24.0108**	**131.1465**	**0.4474**	**29.7674**	**0.5576**	**30.3250**	**7.9563**	**0.5145**	**8.4708**		**32,398.7720**	**32,398.7720**	**0.8936**		**32,417.5373**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913
Total	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7620	17.4817	40.3261	0.1080	3.0669	0.3675	3.4344	0.8738	0.3381	1.2119		10,108.5496	10,108.5496	0.0704		10,110.0274
Worker	31.3371	6.5291	90.8204	0.3394	26.7005	0.1901	26.8906	7.0826	0.1764	7.2589		22,290.2224	22,290.2224	0.8232		22,307.5099
Total	36.0991	24.0108	131.1465	0.4474	29.7674	0.5576	30.3250	7.9563	0.5145	8.4708		32,398.7720	32,398.7720	0.8936		32,417.5373

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7406	17.2850	39.7018	0.1081	3.0677	0.3676	3.4353	0.8741	0.3382	1.2123		10,117.5345	10,117.5345	0.0705		10,119.0145
Worker	30.3566	6.2844	87.7497	0.3394	26.7005	0.1921	26.8927	7.0826	0.1783	7.2608		22,081.2403	22,081.2403	0.8029		22,098.1015
Total	**35.0972**	**23.5695**	**127.4515**	**0.4474**	**29.7682**	**0.5598**	**30.3280**	**7.9566**	**0.5165**	**8.4731**		**32,198.7747**	**32,198.7747**	**0.8734**		**32,217.1160**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913
Total	**1.3602**	**12.3983**	**16.0371**	**0.0268**		**0.5245**	**0.5245**		**0.4935**	**0.4935**	**0.0000**	**2,543.5548**	**2,543.5548**	**0.5970**		**2,556.0913**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7406	17.2850	39.7018	0.1081	3.0677	0.3676	3.4353	0.8741	0.3382	1.2123		10,117.5345	10,117.5345	0.0705		10,119.0145
Worker	30.3566	6.2844	87.7497	0.3394	26.7005	0.1921	26.8927	7.0826	0.1783	7.2608		22,081.2403	22,081.2403	0.8029		22,098.1015
Total	**35.0972**	**23.5695**	**127.4515**	**0.4474**	**29.7682**	**0.5598**	**30.3280**	**7.9566**	**0.5165**	**8.4731**		**32,198.7747**	**32,198.7747**	**0.8734**		**32,217.1160**

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7507	17.1308	39.2309	0.1082	3.0685	0.3683	3.4369	0.8744	0.3389	1.2133		10,125.8740	10,125.8740	0.0707		10,127.3579
Worker	29.4121	6.0675	85.0372	0.3394	26.7005	0.1939	26.8944	7.0826	0.1799	7.2624		21,900.7653	21,900.7653	0.7847		21,917.2441
Total	34.1628	23.1982	124.2682	0.4475	29.7691	0.5622	30.3313	7.9570	0.5188	8.4757		32,026.6393	32,026.6393	0.8554		32,044.6020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913
Total	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7507	17.1308	39.2309	0.1082	3.0685	0.3683	3.4369	0.8744	0.3389	1.2133		10,125.8740	10,125.8740	0.0707		10,127.3579
Worker	29.4121	6.0675	85.0372	0.3394	26.7005	0.1939	26.8944	7.0826	0.1799	7.2624		21,900.7653	21,900.7653	0.7847		21,917.2441
Total	**34.1628**	**23.1982**	**124.2682**	**0.4475**	**29.7691**	**0.5622**	**30.3313**	**7.9570**	**0.5188**	**8.4757**		**32,026.6393**	**32,026.6393**	**0.8554**		**32,044.6020**

3.5 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7220	16.9899	38.6836	0.1082	3.0692	0.3685	3.4377	0.8747	0.3391	1.2137		10,132.1809	10,132.1809	0.0708		10,133.6665
Worker	28.5153	5.8732	82.6674	0.3394	26.7005	0.1954	26.8960	7.0826	0.1813	7.2639		21,746.5648	21,746.5648	0.7684		21,762.7018
Total	**33.2373**	**22.8631**	**121.3510**	**0.4476**	**29.7697**	**0.5640**	**30.3337**	**7.9572**	**0.5204**	**8.4776**		**31,878.7457**	**31,878.7457**	**0.8392**		**31,896.3687**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913
Total	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7220	16.9899	38.8836	0.1082	3.0692	0.3685	3.4377	0.8747	0.3391	1.2137		10,132.1809	10,132.1809	0.0708		10,133.6669
Worker	28.5153	5.8732	82.6674	0.3394	26.7005	0.1954	26.8960	7.0826	0.1813	7.2639		21,746.5648	21,746.5648	0.7684		21,762.7018
Total	33.2373	22.8631	121.3510	0.4476	29.7697	0.5640	30.3337	7.9572	0.5204	8.4776		31,878.7457	31,878.7457	0.8392		31,896.3687

3.5 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7107	16.8733	38.2762	0.1083	3.0699	0.3687	3.4386	0.8749	0.3392	1.2142		10,137.9538	10,137.9538	0.0708		10,139.4415
Worker	27.6159	5.6875	80.3857	0.3394	26.7005	0.1966	26.8972	7.0826	0.1824	7.2650		21,614.9205	21,614.9205	0.7528		21,630.7282
Total	32.3266	22.5608	118.6619	0.4476	29.7704	0.5654	30.3358	7.9575	0.5217	8.4792		31,752.8743	31,752.8743	0.8236		31,770.1696

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913
Total	1.3602	12.3983	16.0371	0.0268		0.5245	0.5245		0.4935	0.4935	0.0000	2,543.5548	2,543.5548	0.5970		2,556.0913

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7107	16.8733	38.2762	0.1083	3.0699	0.3687	3.4386	0.8749	0.3392	1.2142		10,137.9539	10,137.9538	0.0708		10,139.4415
Worker	27.6159	5.6875	80.3857	0.3394	26.7005	0.1966	26.8972	7.0826	0.1824	7.2650		21,614.9205	21,614.9205	0.7528		21,630.7282
Total	32.3266	22.5608	118.6619	0.4476	29.7704	0.5654	30.3358	7.9575	0.5217	8.4792		31,752.8743	31,752.8743	0.8236		31,770.1696

3.5 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7132	16.7675	38.0639	0.1063	3.0705	0.3690	3.4395	0.8752	0.3395	1.2146		10,143.9428	10,143.9426	0.0709		10,145.4322
Worker	26.7511	5.5189	78.4023	0.3394	26.7005	0.1976	26.8981	7.0626	0.1833	7.2659		21,503.8089	21,503.8089	0.7384		21,519.3152
Total	31.4643	22.2864	116.4662	0.4477	29.7710	0.5665	30.3376	7.9377	0.5227	8.4805		31,647.7514	31,647.7514	0.8093		31,664.7474

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128
Total	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7132	16.7675	38.0639	0.1083	3.0705	0.3690	3.4395	0.8752	0.3395	1.2146		10,143.9426	10,143.9426	0.0709		10,145.4322
Worker	26.7511	5.5189	78.4023	0.3394	26.7005	0.1976	26.8981	7.0826	0.1833	7.2659		21,503.8089	21,503.8089	0.7384		21,519.3152
Total	31.4643	22.2864	116.4662	0.4477	29.7710	0.5665	30.3376	7.9577	0.5227	8.4805		31,647.7514	31,647.7514	0.8093		31,664.7474

3.5 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7219	16.6831	37.8728	0.1084	3.0712	0.3694	3.4406	0.8755	0.3399	1.2153		10,150.7582	10,150.7582	0.0710		10,152.2499
Worker	25.9465	5.3620	76.6069	0.3394	26.7005	0.1981	26.8987	7.0826	0.1838	7.2664		21,410.8254	21,410.8254	0.7254		21,426.0583
Total	30.6684	22.0451	114.4797	0.4478	29.7718	0.5675	30.3393	7.9580	0.5237	8.4817		31,561.5835	31,561.5835	0.7964		31,578.3082

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128
Total	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7219	16.6831	37.8728	0.1084	3.0712	0.3694	3.4406	0.8755	0.3399	1.2153		10,150.7582	10,150.7582	0.0710		10,152.2499
Worker	25.9465	5.3620	76.6069	0.3394	26.7005	0.1981	26.8987	7.0826	0.1838	7.2664		21,410.8254	21,410.8254	0.7254		21,426.0583
Total	30.6684	22.0451	114.4797	0.4478	29.7718	0.5675	30.3393	7.9580	0.5237	8.4817		31,561.5835	31,561.5835	0.7964		31,578.3082

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7213	16.6090	37.7050	0.1084	3.0720	0.3698	3.4418	0.8758	0.3402	1.2160		10,157.1317	10,157.1317	0.0711		10,158.6254
Worker	25.2101	5.2266	75.0793	0.3394	26.7005	0.1985	26.8991	7.0826	0.1842	7.2668		21,333.4677	21,333.4677	0.7139		21,348.4603
Total	**29.9314**	**21.8357**	**112.7843**	**0.4478**	**29.7726**	**0.5683**	**30.3409**	**7.9583**	**0.5244**	**8.4828**		**31,490.5994**	**31,490.5994**	**0.7851**		**31,507.0857**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128
Total	**1.3029**	**7.9106**	**16.1165**	**0.0308**		**0.1475**	**0.1475**		**0.1475**	**0.1475**	**0.0000**	**2,882.1833**	**2,882.1833**	**0.1157**		**2,884.6128**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7213	16.6090	37.7050	0.1084	3.0720	0.3698	3.4418	0.8758	0.3402	1.2160		10,157.1317	10,157.1317	0.0711		10,158.6254
Worker	25.2101	5.2266	75.0793	0.3394	26.7005	0.1985	26.8991	7.0826	0.1842	7.2668		21,333.4677	21,333.4677	0.7139		21,348.4603
Total	**29.9314**	**21.8357**	**112.7843**	**0.4478**	**29.7726**	**0.5683**	**30.3409**	**7.9583**	**0.5244**	**8.4828**		**31,490.5994**	**31,490.5994**	**0.7851**		**31,507.0857**

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7261	16.5393	37.5813	0.1085	3.0728	0.3701	3.4429	0.8761	0.3405	1.2166		10,163.0690	10,163.0690	0.0712		10,164.5642
Worker	24.5654	5.1151	73.8357	0.3394	26.7005	0.1988	26.8994	7.0826	0.1845	7.2670		21,269.4258	21,269.4258	0.7043		21,284.2165
Total	29.2914	21.6544	111.4170	0.4479	29.7733	0.5689	30.3422	7.9586	0.5250	8.4836		31,432.4948	31,432.4948	0.7755		31,448.7808

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128
Total	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7261	16.5393	37.5813	0.1065	3.0728	0.3701	3.4429	0.8761	0.3405	1.2166		10,163.0690	10,163.0690	0.0712		10,164.5642
Worker	24.5654	5.1151	73.8357	0.3394	26.7005	0.1988	26.8994	7.0826	0.1845	7.2670		21,269.4258	21,269.4258	0.7043		21,284.2165
Total	29.2914	21.6544	111.4170	0.4479	29.7733	0.5689	30.3422	7.9586	0.5250	8.4836		31,432.4948	31,432.4948	0.7755		31,448.7808

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7304	16.4775	37.4511	0.1066	3.0734	0.3703	3.4438	0.8763	0.3407	1.2171		10,168.8543	10,168.8543	0.0713		10,170.3510
Worker	23.8025	5.0189	72.6259	0.3394	26.7005	0.1989	26.8994	7.0826	0.1845	7.2671		21,215.2512	21,215.2512	0.6952		21,229.8498

Total	28.5329	21.4964	110.0770	0.4480	29.7740	0.5692	30.3432	7.9589	0.5253	8.4842		31,384.1055	31,384.1055	0.7664		31,400.2007

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128
Total	1.3029	7.9106	16.1165	0.0308		0.1475	0.1475		0.1475	0.1475	0.0000	2,882.1833	2,882.1833	0.1157		2,884.6128

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7304	16.4775	37.4511	0.1086	3.0734	0.3703	3.4438	0.8763	0.3407	1.2171		10,168.8543	10,168.8543	0.0713		10,170.3510
Worker	23.8025	5.0189	72.6259	0.3394	26.7005	0.1989	26.8994	7.0826	0.1845	7.2671		21,215.2512	21,215.2512	0.6952		21,229.8498
Total	28.5329	21.4964	110.0770	0.4480	29.7740	0.5692	30.3432	7.9589	0.5253	8.4842		31,384.1055	31,384.1055	0.7664		31,400.2007

3.5 Building Construction - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7235	16.4220	37.3122	0.1086	3.0741	0.3704	3.4444	0.8766	0.3408	1.2173		10,173.8757	10,173.8757	0.0713		10,175.3734
Worker	23.1324	4.9436	71.5854	0.3394	26.7005	0.1989	26.8994	7.0826	0.1845	7.2671		21,170.3191	21,170.3191	0.6873		21,184.7525
Total	27.8559	21.3656	108.8976	0.4480	29.7746	0.5693	30.3439	7.9592	0.5253	8.4844		31,344.1948	31,344.1948	0.7586		31,360.1259

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391
Total	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7235	16.4220	37.3122	0.1086	3.0741	0.3704	3.4444	0.8766	0.3408	1.2173		10,173.8757	10,173.8757	0.0713		10,175.3734

Worker	23.1324	4.9436	71.5854	0.3394	26.7005	0.1989	26.8994	7.0826	0.1845	7.2671		21,170.3191	21,170.3191	0.6873		21,184.7525
Total	27.8559	21.3656	108.8976	0.4480	29.7746	0.5693	30.3439	7.9592	0.5253	8.4844		31,344.1948	31,344.1948	0.7586		31,360.1259

3.5 Building Construction - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391

Total	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

3.5 Building Construction - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391
Total	**1.2112**	**7.1444**	**16.0774**	**0.0308**		**0.0900**	**0.0900**		**0.0900**	**0.0900**	**0.0000**	**2,882.1833**	**2,882.1833**	**0.1074**		**2,884.4391**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

3.5 Building Construction - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391
Total	**1.2112**	**7.1444**	**16.0774**	**0.0308**		**0.0900**	**0.0900**		**0.0900**	**0.0900**	**0.0000**	**2,882.1833**	**2,882.1833**	**0.1074**		**2,884.4391**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

3.5 Building Construction - 2039

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Off-Road	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391
Total	1.2112	7.1444	16.0774	0.0308		0.0900	0.0900		0.0900	0.0900	0.0000	2,882.1833	2,882.1833	0.1074		2,884.4391

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

3.5 Building Construction - 2040

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091
Total	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1915	6.8763	16.0781	0.0308		0.0734	0.0734		0.0734	0.0734	0.0000	2,882.1837	2,882.1837	0.1037		2,884.3604
Total	**1.1915**	**6.8763**	**16.0781**	**0.0308**		**0.0734**	**0.0734**		**0.0734**	**0.0734**	**0.0000**	**2,882.1837**	**2,882.1837**	**0.1037**		**2,884.3604**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					**25.4417**	**0.0000**	**25.4417**	**6.2448**	**0.0000**	**6.2448**			**0.0000**			**0.0000**

3.5 Building Construction - 2041

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091
Total	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1915	6.8763	16.0781	0.0308		0.0734	0.0734		0.0734	0.0734	0.0000	2,882.1837	2,882.1837	0.1037		2,884.3604
Total	1.1915	6.8763	16.0781	0.0308		0.0734	0.0734		0.0734	0.0734	0.0000	2,882.1837	2,882.1837	0.1037		2,884.3604

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

3.5 Building Construction - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091
Total	1.1926	6.8826	16.0929	0.0308		0.0734	0.0734		0.0734	0.0734		2,884.8303	2,884.8303	0.1038		2,887.0091

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1915	6.8763	16.0781	0.0308		0.0734	0.0734		0.0734	0.0734	0.0000	2,882.1837	2,882.1837	0.1037		2,884.3604
Total	1.1915	6.8763	16.0781	0.0308		0.0734	0.0734		0.0734	0.0734	0.0000	2,882.1837	2,882.1837	0.1037		2,884.3604

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					2.2387	0.0000	2.2387	0.5495	0.0000	0.5495			0.0000			0.0000
Worker					23.2031	0.0000	23.2031	5.6953	0.0000	5.6953			0.0000			0.0000
Total					25.4417	0.0000	25.4417	6.2448	0.0000	6.2448			0.0000			0.0000

3.6 Paving - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000

3.6 Paving - 2043

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000

3.6 Paving - 2044

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9902	3.5998	15.4879	0.0275		0.1138	0.1138		0.1138	0.1138		2,599.9866	2,599.9866	0.0874		2,601.8224

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9893	3.5965	15.4737	0.0274		0.1137	0.1137		0.1137	0.1137	0.0000	2,597.6013	2,597.6013	0.0873		2,599.4354

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000
Total					0.0992	0.0000	0.0992	0.0243	0.0000	0.0243			0.0000			0.0000

3.7 Architectural Coating - 2044

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6561
Total	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6561

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000
Total					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1148	0.7264	1.7907	2.9700e-003		7.4200e-003	7.4200e-003		7.4200e-003	7.4200e-003	0.0000	281.1898	281.1898	9.9000e-003		281.3977
Total	0.1148	0.7264	1.7907	2.9700e-003		7.4200e-003	7.4200e-003		7.4200e-003	7.4200e-003	0.0000	281.1898	281.1898	9.9000e-003		281.3977

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000

Total					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000

3.7 Architectural Coating - 2045

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6561
Total	**0.1149**	**0.7270**	**1.7923**	**2.9700e-003**		**7.4300e-003**	**7.4300e-003**		**7.4300e-003**	**7.4300e-003**		**281.4481**	**281.4481**	**9.9000e-003**		**281.6561**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000
Total					**4.6406**	**0.0000**	**4.6406**	**1.1391**	**0.0000**	**1.1391**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1148	0.7264	1.7907	2.9700e-003		7.4200e-003	7.4200e-003		7.4200e-003	7.4200e-003	0.0000	281.1898	281.1898	9.9000e-003		281.3977
Total	**0.1148**	**0.7264**	**1.7907**	**2.9700e-003**		**7.4200e-003**	**7.4200e-003**		**7.4200e-003**	**7.4200e-003**	**0.0000**	**281.1898**	**281.1898**	**9.9000e-003**		**281.3977**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000
Total					4.6406	0.0000	4.6406	1.1391	0.0000	1.1391			0.0000			0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	436.9889	331.5763	1,774.2146	2.8362	189.2868	5.0090	194.2958	50.5578	4.5952	55.1530		259,472.1612	259,472.1612	12.1287		259,726.8629
Unmitigated	437.5580	332.0206	1,776.4105	2.8406	189.5906	5.0164	194.6070	50.8389	4.6020	55.2410		259,876.0070	259,876.0070	12.1456		260,131.0652

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	32,126.25	34,905.00	29591.25	82,528,815	82,396,552
Total	32,126.25	34,905.00	29,591.25	82,528,815	82,396,552

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504217	0.068068	0.177511	0.150009	0.045572	0.006451	0.019525	0.014983	0.002306	0.002359	0.006212	0.000585	0.002203

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.1991	10.2472	4.3605	0.0654		0.8285	0.8285		0.8285	0.8285		13,081.5302	13,081.5302	0.2507	0.2398	13,161.1422
NaturalGas Unmitigated	1.4371	12.2809	5.2259	0.0784		0.9929	0.9929		0.9929	0.9929		15,677.7329	15,677.7329	0.3005	0.2874	15,773.1450

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	133261	1.4371	12.2809	5.2259	0.0784		0.9929	0.9929		0.9929	0.9929		15,677.7329	15,677.7329	0.3005	0.2874	15,773.1450
Total		1.4371	12.2809	5.2259	0.0784		0.9929	0.9929		0.9929	0.9929		15,677.7329	15,677.7329	0.3005	0.2874	15,773.1450

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	111.193	1.1991	10.2472	4.3605	0.0654		0.8285	0.8285		0.8285	0.8285		13,081.5302	13,081.5302	0.2507	0.2398	13,161.1422
Total		1.1991	10.2472	4.3605	0.0654		0.8285	0.8285		0.8285	0.8285		13,081.5302	13,081.5302	0.2507	0.2398	13,161.1422

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	126.6759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076
Unmitigated	134.4759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					

Architectural Coating	16.7146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	104.3250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	13.4363	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878		724.1925	724.1925	0.7722		740.4076
Total	134.4759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	16.7146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	96.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	13.4363	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878		724.1925	724.1925	0.7722		740.4076
Total	126.6759	4.8837	412.0181	0.0212		2.1878	2.1878		2.1878	2.1878	0.0000	724.1925	724.1925	0.7722	0.0000	740.4076

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

Elk Grove Housing Element

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	4,875.00	Dwelling Unit	353.50	4,875,000.00	15680

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2014
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Increased acreage and population to consistent with Project assumptions.

Land Use Change -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	128.29	353.50
tblLandUse	Population	13,016.00	15,680.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.6328	6.4753	4.8392	5.3800e-003	0.0144	0.3299	0.3443	3.8200e-003	0.3080	0.3118	0.0000	506.7835	506.7835	0.1341	0.0000	509.5986
2015	0.6673	6.8411	5.2083	5.3500e-003	2.1837	0.3588	2.5425	1.1959	0.3323	1.5282	0.0000	502.3173	502.3173	0.1393	0.0000	505.2425
2016	0.7981	8.5825	6.0430	6.9400e-003	4.8750	0.4298	5.3048	2.3115	0.3954	2.7069	0.0000	650.0083	650.0083	0.1920	0.0000	654.0406
2017	0.8265	9.0563	6.1819	8.2500e-003	2.7078	0.4314	3.1392	1.1200	0.3969	1.5169	0.0000	760.9286	760.9286	0.2290	0.0000	765.7369
2018	1.7657	8.0001	9.2018	0.0166	3.3372	0.3513	3.6885	1.2887	0.3239	1.6126	0.0000	1,353.2309	1,353.2309	0.2281	0.0000	1,358.0199
2019	6.4279	8.2581	25.1432	0.0576	3.7520	0.2562	4.0082	1.0056	0.2392	1.2448	0.0000	4,185.8061	4,185.8061	0.2088	0.0000	4,190.1900
2020	5.9711	7.3827	23.4986	0.0578	3.7665	0.2276	3.9941	1.0095	0.2125	1.2221	0.0000	4,063.5675	4,063.5675	0.2013	0.0000	4,067.7955
2021	5.6248	6.4549	22.1657	0.0575	3.7522	0.2005	3.9527	1.0057	0.1872	1.1929	0.0000	4,004.1395	4,004.1395	0.1940	0.0000	4,008.2137
2022	5.3625	5.8090	21.1101	0.0573	3.7380	0.1796	3.9176	1.0019	0.1676	1.1695	0.0000	3,950.8164	3,950.8164	0.1881	0.0000	3,954.7668
2023	5.1275	5.3265	20.1320	0.0573	3.7381	0.1625	3.9006	1.0020	0.1516	1.1535	0.0000	3,916.3737	3,916.3737	0.1831	0.0000	3,920.2185
2024	4.9856	5.1653	19.5986	0.0578	3.7670	0.1529	3.9199	1.0097	0.1425	1.1522	0.0000	3,917.4609	3,917.4609	0.1806	0.0000	3,921.2539
2025	4.8094	4.9503	18.9364	0.0575	3.7528	0.1415	3.8942	1.0059	0.1318	1.1377	0.0000	3,877.2449	3,877.2449	0.1767	0.0000	3,880.9550
2026	4.6842	4.8872	18.4605	0.0576	3.7529	0.1418	3.8946	1.0060	0.1320	1.1380	0.0000	3,855.8025	3,855.8025	0.1743	0.0000	3,859.4624
2027	4.5677	4.8341	18.0557	0.0576	3.7530	0.1421	3.8951	1.0060	0.1323	1.1384	0.0000	3,837.3177	3,837.3177	0.1722	0.0000	3,840.9328
2028	4.4348	4.7677	17.6044	0.0573	3.7387	0.1418	3.8804	1.0022	0.1320	1.1342	0.0000	3,806.7545	3,806.7545	0.1696	0.0000	3,810.3156
2029	4.3389	4.7427	17.3334	0.0576	3.7531	0.1425	3.8956	1.0061	0.1327	1.1388	0.0000	3,807.8071	3,807.8071	0.1684	0.0000	3,811.3432
2030	4.2255	4.1172	17.0823	0.0581	3.7532	0.0934	3.8466	1.0061	0.0877	1.0938	0.0000	3,836.5738	3,836.5738	0.1097	0.0000	3,838.8768
2031	4.1281	4.0825	16.8462	0.0581	3.7533	0.0935	3.8468	1.0062	0.0878	1.0939	0.0000	3,827.2885	3,827.2885	0.1081	0.0000	3,829.5594
2032	4.0535	4.0679	16.7086	0.0583	3.7678	0.0940	3.8618	1.0100	0.0882	1.0983	0.0000	3,834.2802	3,834.2802	0.1072	0.0000	3,836.6315
2033	3.9443	4.0110	16.4204	0.0579	3.7391	0.0933	3.8325	1.0024	0.0876	1.0900	0.0000	3,798.7958	3,798.7958	0.1053	0.0000	3,801.0063
2034	3.8497	3.9885	16.2630	0.0579	3.7392	0.0934	3.8326	1.0024	0.0877	1.0901	0.0000	3,793.6236	3,793.6236	0.1042	0.0000	3,795.8116
2035	3.7675	3.8850	16.1805	0.0581	3.7537	0.0862	3.8399	1.0063	0.0805	1.0868	0.0000	3,803.9502	3,803.9502	0.1027	0.0000	3,806.1066
2036	0.1588	0.9368	2.1081	4.0400e-003	3.2005	0.0118	3.2123	0.7856	0.0118	0.7974	0.0000	342.8367	342.8367	0.0128	0.0000	343.1050
2037	0.1582	0.9332	2.1000	4.0200e-003	3.1883	0.0118	3.2000	0.7826	0.0118	0.7943	0.0000	341.5281	341.5281	0.0127	0.0000	341.7954

2038	0.1582	0.9332	2.1000	4.0200e-003	3.1883	0.0118	3.2000	0.7826	0.0118	0.7943	0.0000	341.5281	341.5281	0.0127	0.0000	341.7954
2039	0.1576	0.9296	2.0920	4.0100e-003	3.1760	0.0117	3.1877	0.7796	0.0117	0.7913	0.0000	340.2196	340.2196	0.0127	0.0000	340.4859
2040	0.1556	0.8982	2.1001	4.0200e-003	3.1883	9.5800e-003	3.1978	0.7826	9.5800e-003	0.7922	0.0000	341.5282	341.5282	0.0123	0.0000	341.7861
2041	0.1556	0.8982	2.1001	4.0200e-003	3.1883	9.5800e-003	3.1978	0.7826	9.5800e-003	0.7922	0.0000	341.5282	341.5282	0.0123	0.0000	341.7861
2042	0.1449	0.7242	2.0681	3.8400e-003	1.8985	0.0117	1.9102	0.4660	0.0117	0.4777	0.0000	327.8327	327.8327	0.0115	0.0000	328.0741
2043	0.1292	0.4698	2.0212	3.5800e-003	0.0124	0.0149	0.0273	3.0500e-003	0.0149	0.0179	0.0000	307.8062	307.8062	0.0104	0.0000	308.0235
2044	0.0469	0.1997	0.7338	1.2800e-003	0.4224	4.8500e-003	0.4272	0.1037	4.8500e-003	0.1085	0.0000	110.0920	110.0920	3.7400e-003	0.0000	110.1705
2045	0.0145	0.0916	0.2258	3.7000e-004	0.5615	9.4000e-004	0.5624	0.1378	9.4000e-004	0.1388	0.0000	32.1710	32.1710	1.1300e-003	0.0000	32.1948
Total	**86.2730**	**132.7003**	**370.6630**	**1.0571**	**98.9129**	**4.4424**	**103.3553**	**28.4198**	**4.1359**	**32.5557**	**0.0000**	**72,717.9422**	**72,717.9422**	**3.6787**	**0.0000**	**72,795.1949**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.6321	6.4676	4.8336	5.3700e-003	0.0144	0.3295	0.3439	3.8200e-003	0.3076	0.3115	0.0000	506.1970	506.1970	0.1339	0.0000	509.0088
2015	0.6665	6.8330	5.2022	5.3400e-003	0.8612	0.3584	1.2196	0.4689	0.3319	0.8008	0.0000	501.7371	501.7371	0.1391	0.0000	504.6588
2016	0.7972	8.5723	6.0360	6.9300e-003	1.9124	0.4293	2.3417	0.9044	0.3949	1.2994	0.0000	649.2545	649.2545	0.1918	0.0000	653.2820
2017	0.8256	9.0455	6.1747	8.2400e-003	1.0677	0.4309	1.4986	0.4399	0.3964	0.8363	0.0000	760.0429	760.0429	0.2287	0.0000	764.8454
2018	1.7650	7.9918	9.1959	0.0166	1.6971	0.3509	2.0480	0.6086	0.3235	0.9321	0.0000	1,352.4415	1,352.4415	0.2278	0.0000	1,357.2254
2019	6.4275	8.2549	25.1405	0.0576	3.7520	0.2560	4.0080	1.0056	0.2390	1.2447	0.0000	4,185.4426	4,185.4426	0.2087	0.0000	4,189.8247
2020	5.9707	7.3797	23.4960	0.0578	3.7665	0.2274	3.9939	1.0095	0.2124	1.2219	0.0000	4,063.2081	4,063.2081	0.2012	0.0000	4,067.4342
2021	5.6245	6.4522	22.1631	0.0575	3.7522	0.2004	3.9526	1.0057	0.1871	1.1928	0.0000	4,003.7814	4,003.7814	0.1939	0.0000	4,007.8538
2022	5.3622	5.8066	21.1076	0.0573	3.7380	0.1795	3.9174	1.0019	0.1675	1.1694	0.0000	3,950.4596	3,950.4596	0.1880	0.0000	3,954.4081
2023	5.1273	5.3243	20.1295	0.0573	3.7361	0.1624	3.9005	1.0020	0.1515	1.1534	0.0000	3,916.0167	3,916.0167	0.1830	0.0000	3,919.8598
2024	4.9854	5.1633	19.5961	0.0578	3.7670	0.1528	3.9198	1.0097	0.1424	1.1521	0.0000	3,917.1011	3,917.1011	0.1805	0.0000	3,920.8923
2025	4.8092	4.9484	18.9339	0.0575	3.7528	0.1414	3.8942	1.0059	0.1317	1.1376	0.0000	3,876.8864	3,876.8864	0.1766	0.0000	3,880.5947
2026	4.6840	4.8853	18.4580	0.0576	3.7529	0.1417	3.8945	1.0060	0.1320	1.1379	0.0000	3,855.4440	3,855.4440	0.1742	0.0000	3,859.1021

2027	4.5675	4.8321	18.0532	0.0576	3.7530	0.1420	3.8950	1.0060	0.1323	1.1383	0.0000	3,836.9591	3,836.9591	0.1721	0.0000	3,840.5725
2028	4.4346	4.7658	17.6019	0.0573	3.7367	0.1417	3.8804	1.0022	0.1320	1.1342	0.0000	3,806.3973	3,806.3973	0.1695	0.0000	3,809.9567
2029	4.3387	4.7408	17.3309	0.0576	3.7531	0.1424	3.8956	1.0061	0.1326	1.1387	0.0000	3,807.4486	3,807.4486	0.1683	0.0000	3,810.9829
2030	4.2253	4.1160	17.0798	0.0581	3.7532	0.0934	3.8466	1.0061	0.0876	1.0938	0.0000	3,836.1675	3,836.1675	0.1097	0.0000	3,838.4702
2031	4.1279	4.0813	16.8437	0.0581	3.7533	0.0935	3.8468	1.0062	0.0878	1.0939	0.0000	3,826.8822	3,826.8822	0.1081	0.0000	3,829.1528
2032	4.0533	4.0667	16.7061	0.0583	3.7678	0.0940	3.8618	1.0100	0.0882	1.0982	0.0000	3,833.8724	3,833.8724	0.1072	0.0000	3,836.1233
2033	3.9441	4.0098	16.4179	0.0579	3.7391	0.0933	3.8325	1.0024	0.0876	1.0900	0.0000	3,798.3911	3,798.3911	0.1052	0.0000	3,800.6012
2034	3.8495	3.9872	16.2605	0.0579	3.7392	0.0934	3.8326	1.0024	0.0876	1.0900	0.0000	3,793.2189	3,793.2189	0.1042	0.0000	3,795.4065
2035	3.7673	3.8839	16.1780	0.0581	3.7537	0.0862	3.8399	1.0063	0.0805	1.0868	0.0000	3,803.5439	3,803.5439	0.1027	0.0000	3,805.7000
2036	0.1586	0.9357	2.1056	4.0300e-003	3.2005	0.0118	3.2123	0.7856	0.0118	0.7974	0.0000	342.4288	342.4288	0.0128	0.0000	342.6968
2037	0.1580	0.9321	2.0975	4.0200e-003	3.1883	0.0117	3.2000	0.7826	0.0117	0.7943	0.0000	341.1218	341.1218	0.0127	0.0000	341.3888
2038	0.1580	0.9321	2.0975	4.0200e-003	3.1883	0.0117	3.2000	0.7826	0.0117	0.7943	0.0000	341.1218	341.1218	0.0127	0.0000	341.3888
2039	0.1574	0.9285	2.0895	4.0000e-003	3.1760	0.0117	3.1877	0.7796	0.0117	0.7913	0.0000	339.8149	339.8149	0.0127	0.0000	340.0808
2040	0.1555	0.8971	2.0976	4.0200e-003	3.1883	9.5700e-003	3.1978	0.7826	9.5700e-003	0.7921	0.0000	341.1219	341.1219	0.0123	0.0000	341.3795
2041	0.1555	0.8971	2.0976	4.0200e-003	3.1883	9.5700e-003	3.1978	0.7826	9.5700e-003	0.7921	0.0000	341.1219	341.1219	0.0123	0.0000	341.3795
2042	0.1447	0.7233	2.0656	3.8400e-003	1.8985	0.0117	1.9102	0.4660	0.0117	0.4777	0.0000	327.4427	327.4427	0.0115	0.0000	327.6838
2043	0.1291	0.4892	2.0188	3.5800e-003	0.0124	0.0148	0.0273	3.0500e-003	0.0148	0.0179	0.0000	307.4400	307.4400	0.0103	0.0000	307.6571
2044	0.0469	0.1995	0.7329	1.2800e-003	0.4224	4.8500e-003	0.4272	0.1037	4.8500e-003	0.1085	0.0000	109.9610	109.9610	3.7300e-003	0.0000	110.0394
2045	0.0145	0.0915	0.2256	3.7000e-004	0.5615	9.3000e-004	0.5624	0.1378	9.3000e-004	0.1388	0.0000	32.1327	32.1327	1.1300e-003	0.0000	32.1565
Total	**86.2634**	**132.6144**	**370.5672**	**1.0569**	**91.3476**	**4.4387**	**95.7863**	**24.9257**	**4.1324**	**29.0581**	**0.0000**	**72,704.6013**	**72,704.6013**	**3.6765**	**0.0000**	**72,781.8073**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	*PM2.5* Total	*Bio- CO2*	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.01	0.06	0.03	0.02	7.65	0.08	7.32	12.29	0.08	10.74	0.00	0.02	0.02	0.06	0.00	0.02

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Area	23.7693	0.6105	51.5023	2.6500e-003		0.2735	0.2735		0.2735	0.2735	0.0000	82.1220	82.1220	0.0876	0.0000	83.9808
Energy	0.2623	2.2413	0.9537	0.0143		0.1812	0.1812		0.1812	0.1812	0.0000	7,318.8195	7,318.8195	0.2818	0.0956	7,354.3710
Mobile	70.8033	60.1134	278.3360	0.4388	30.7093	0.8433	31.5527	8.2258	0.7737	8.9995	0.0000	36,499.6213	36,499.6213	1.8459	0.0000	36,538.3853
Waste						0.0000	0.0000		0.0000	0.0000	455.2072	0.0000	455.2072	26.9020	0.0000	1,020.1488
Water						0.0000	0.0000		0.0000	0.0000	112.3765	611.4171	723.7937	0.4168	0.2506	810.2320
Total	94.8348	62.9652	330.7920	0.4558	30.7093	1.2980	32.0073	8.2258	1.2284	9.4542	567.5838	44,511.9800	45,079.5637	29.5341	0.3462	45,807.0978

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	22.3458	0.6105	51.5023	2.6500e-003		0.2735	0.2735		0.2735	0.2735	0.0000	82.1220	82.1220	0.0876	0.0000	83.9808
Energy	0.2188	1.8701	0.7958	0.0119		0.1512	0.1512		0.1512	0.1512	0.0000	6,660.0125	6,660.0125	0.2623	0.0854	6,691.9905
Mobile	70.7074	60.0324	278.0289	0.4361	30.6601	0.8421	31.5022	8.2126	0.7725	8.9851	0.0000	36,443.0219	36,443.0219	1.8433	0.0000	36,481.7317
Waste						0.0000	0.0000		0.0000	0.0000	455.2072	0.0000	455.2072	26.9020	0.0000	1,020.1488
Water						0.0000	0.0000		0.0000	0.0000	89.9012	526.6655	616.5668	0.3365	0.2011	685.9748
Total	93.2720	62.5130	330.3270	0.4527	30.6601	1.2668	31.9269	8.2126	1.1972	9.4098	545.1085	43,711.8220	44,256.9304	29.4316	0.2865	44,963.8065

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	1.65	0.72	0.14	0.67	0.16	2.41	0.25	0.16	2.54	0.47	3.96	1.80	1.82	0.35	17.24	1.84

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2014	7/14/2015	5	400	
2	Site Preparation	Site Preparation	7/15/2015	6/14/2016	5	240	

3	Grading	Grading	6/15/2016	10/30/2018	5	620	
4	Building Construction	Building Construction	10/31/2018	8/5/2042	5	6200	
5	Paving	Paving	8/6/2042	4/12/2044	5	440	
6	Architectural Coating	Architectural Coating	4/13/2044	12/19/2045	5	440	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1550

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,510.00	521.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	702.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.5998	6.4654	4.7355	5.2100e-003		0.3298	0.3298		0.3079	0.3079	0.0000	492.9762	492.9762	0.1332	0.0000	495.7737
Total	0.5998	6.4654	4.7355	5.2100e-003		0.3298	0.3298		0.3079	0.3079	0.0000	492.9762	492.9762	0.1332	0.0000	495.7737

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0330	9.9200e-003	0.1037	1.7000e-004	0.0144	1.2000e-004	0.0145	3.8200e-003	1.1000e-004	3.9400e-003	0.0000	13.8073	13.8073	8.4000e-004	0.0000	13.8249
Total	0.0330	9.9200e-003	0.1037	1.7000e-004	0.0144	1.2000e-004	0.0145	3.8200e-003	1.1000e-004	3.9400e-003	0.0000	13.8073	13.8073	8.4000e-004	0.0000	13.8249

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.5991	6.4577	4.7299	5.2000e-003		0.3294	0.3294		0.3075	0.3075	0.0000	492.3897	492.3897	0.1331	0.0000	495.1840
Total	0.5991	6.4577	4.7299	5.2000e-003		0.3294	0.3294		0.3075	0.3075	0.0000	492.3897	492.3897	0.1331	0.0000	495.1840

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0330	9.9200e-003	0.1037	1.7000e-004	0.0144	1.2000e-004	0.0145	3.8200e-003	1.1000e-004	3.9400e-003	0.0000	13.8073	13.8073	8.4000e-004	0.0000	13.8249
Total	0.0330	9.9200e-003	0.1037	1.7000e-004	0.0144	1.2000e-004	0.0145	3.8200e-003	1.1000e-004	3.9400e-003	0.0000	13.8073	13.8073	8.4000e-004	0.0000	13.8249

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3133	3.3612	2.5071	2.7700e-003		0.1703	0.1703		0.1589	0.1589	0.0000	260.2168	260.2168	0.0705	0.0000	261.6982
Total	0.3133	3.3612	2.5071	2.7700e-003		0.1703	0.1703		0.1589	0.1589	0.0000	260.2168	260.2168	0.0705	0.0000	261.6982

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0161	4.6800e-003	0.0490	9.0000e-005	7.6600e-003	6.0000e-005	7.7200e-003	2.0400e-003	6.0000e-005	2.0900e-003	0.0000	7.0930	7.0930	4.0000e-004	0.0000	7.1015
Total	**0.0161**	**4.6800e-003**	**0.0490**	**9.0000e-005**	**7.6600e-003**	**6.0000e-005**	**7.7200e-003**	**2.0400e-003**	**6.0000e-005**	**2.0900e-003**	**0.0000**	**7.0930**	**7.0930**	**4.0000e-004**	**0.0000**	**7.1015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3130	3.3572	2.5042	2.7700e-003		0.1701	0.1701		0.1587	0.1587	0.0000	259.9073	259.9073	0.0705	0.0000	261.3869
Total	**0.3130**	**3.3572**	**2.5042**	**2.7700e-003**		**0.1701**	**0.1701**		**0.1587**	**0.1587**	**0.0000**	**259.9073**	**259.9073**	**0.0705**	**0.0000**	**261.3869**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0161	4.6800e-003	0.0490	9.0000e-005	7.6600e-003	6.0000e-005	7.7200e-003	2.0400e-003	6.0000e-005	2.0900e-003	0.0000	7.0930	7.0930	4.0000e-004	0.0000	7.1015
Total	**0.0161**	**4.6800e-003**	**0.0490**	**9.0000e-005**	**7.6600e-003**	**6.0000e-005**	**7.7200e-003**	**2.0400e-003**	**6.0000e-005**	**2.0900e-003**	**0.0000**	**7.0930**	**7.0930**	**4.0000e-004**	**0.0000**	**7.1015**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1680	0.0000	2.1680	1.1917	0.0000	1.1917	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3209	3.4703	2.6005	2.3900e-003		0.1884	0.1884		0.1733	0.1733	0.0000	227.5368	227.5368	0.0679	0.0000	228.9633
Total	**0.3209**	**3.4703**	**2.6005**	**2.3900e-003**	**2.1680**	**0.1884**	**2.3563**	**1.1917**	**0.1733**	**1.3650**	**0.0000**	**227.5368**	**227.5368**	**0.0679**	**0.0000**	**228.9633**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0169	4.9300e-003	0.0516	1.0000e-004	8.0600e-003	6.0000e-005	8.1300e-003	2.1400e-003	6.0000e-005	2.2000e-003	0.0000	7.4706	7.4706	4.2000e-004	0.0000	7.4795
Total	**0.0169**	**4.9300e-003**	**0.0516**	**1.0000e-004**	**8.0600e-003**	**6.0000e-005**	**8.1300e-003**	**2.1400e-003**	**6.0000e-005**	**2.2000e-003**	**0.0000**	**7.4706**	**7.4706**	**4.2000e-004**	**0.0000**	**7.4795**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8455	0.0000	0.8455	0.4648	0.0000	0.4648	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3205	3.4661	2.5974	2.3800e-003		0.1882	0.1882		0.1731	0.1731	0.0000	227.2661	227.2661	0.0679	0.0000	228.6910
Total	**0.3205**	**3.4661**	**2.5974**	**2.3800e-003**	**0.8455**	**0.1882**	**1.0337**	**0.4648**	**0.1731**	**0.6379**	**0.0000**	**227.2661**	**227.2661**	**0.0679**	**0.0000**	**228.6910**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0169	4.9300e-003	0.0516	1.0000e-004	8.0600e-003	6.0000e-005	8.1300e-003	2.1400e-003	6.0000e-005	2.2000e-003	0.0000	7.4706	7.4706	4.2000e-004	0.0000	7.4795
Total	**0.0169**	**4.9300e-003**	**0.0516**	**1.0000e-004**	**8.0600e-003**	**6.0000e-005**	**8.1300e-003**	**2.1400e-003**	**6.0000e-005**	**2.2000e-003**	**0.0000**	**7.4706**	**7.4706**	**4.2000e-004**	**0.0000**	**7.4795**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1680	0.0000	2.1680	1.1917	0.0000	1.1917	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2996	3.2233	2.4252	2.3100e-003		0.1734	0.1734		0.1595	0.1595	0.0000	217.5749	217.5749	0.0656	0.0000	218.9531
Total	**0.2996**	**3.2233**	**2.4252**	**2.3100e-003**	**2.1680**	**0.1734**	**2.3413**	**1.1917**	**0.1595**	**1.3512**	**0.0000**	**217.5749**	**217.5749**	**0.0656**	**0.0000**	**218.9531**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0150	4.2500e-003	0.0445	9.0000e-005	7.8000e-003	6.0000e-005	7.8600e-003	2.0700e-003	5.0000e-005	2.1300e-003	0.0000	6.9609	6.9609	3.7000e-004	0.0000	6.9688
Total	**0.0150**	**4.2500e-003**	**0.0445**	**9.0000e-005**	**7.8000e-003**	**6.0000e-005**	**7.8600e-003**	**2.0700e-003**	**5.0000e-005**	**2.1300e-003**	**0.0000**	**6.9609**	**6.9609**	**3.7000e-004**	**0.0000**	**6.9688**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8455	0.0000	0.8455	0.4648	0.0000	0.4648	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2992	3.2195	2.4223	2.3000e-003		0.1732	0.1732		0.1593	0.1593	0.0000	217.3161	217.3161	0.0656	0.0000	218.6927
Total	0.2992	3.2195	2.4223	2.3000e-003	0.8455	0.1732	1.0187	0.4648	0.1593	0.6241	0.0000	217.3161	217.3161	0.0656	0.0000	218.6927

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0150	4.2500e-003	0.0445	9.0000e-005	7.8000e-003	6.0000e-005	7.8600e-003	2.0700e-003	5.0000e-005	2.1300e-003	0.0000	6.9609	6.9609	3.7000e-004	0.0000	6.9688
Total	0.0150	4.2500e-003	0.0445	9.0000e-005	7.8000e-003	6.0000e-005	7.8600e-003	2.0700e-003	5.0000e-005	2.1300e-003	0.0000	6.9609	6.9609	3.7000e-004	0.0000	6.9688

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6887	0.0000	2.6887	1.1149	0.0000	1.1149	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4633	5.3492	3.5133	4.4100e-003		0.2563	0.2563		0.2358	0.2358	0.0000	416.0994	416.0994	0.1255	0.0000	418.7352
Total	0.4633	5.3492	3.5133	4.4100e-003	2.6887	0.2563	2.9450	1.1149	0.2358	1.3507	0.0000	416.0994	416.0994	0.1255	0.0000	418.7352

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	5.7200e-003	0.0600	1.3000e-004	0.0105	8.0000e-005	0.0106	2.7900e-003	7.0000e-005	2.8700e-003	0.0000	9.3730	9.3730	5.0000e-004	0.0000	9.3835
Total	0.0202	5.7200e-003	0.0600	1.3000e-004	0.0105	8.0000e-005	0.0106	2.7900e-003	7.0000e-005	2.8700e-003	0.0000	9.3730	9.3730	5.0000e-004	0.0000	9.3835

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0486	0.0000	1.0486	0.4348	0.0000	0.4348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4627	5.3428	3.5092	4.4100e-003		0.2560	0.2560		0.2355	0.2355	0.0000	415.6045	415.6045	0.1254	0.0000	418.2370
Total	0.4627	5.3428	3.5092	4.4100e-003	1.0486	0.2560	1.3046	0.4348	0.2355	0.6703	0.0000	415.6045	415.6045	0.1254	0.0000	418.2370

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	5.7200e-003	0.0600	1.3000e-004	0.0105	8.0000e-005	0.0106	2.7900e-003	7.0000e-005	2.8700e-003	0.0000	9.3730	9.3730	5.0000e-004	0.0000	9.3835
Total	0.0202	5.7200e-003	0.0600	1.3000e-004	0.0105	8.0000e-005	0.0106	2.7900e-003	7.0000e-005	2.8700e-003	0.0000	9.3730	9.3730	5.0000e-004	0.0000	9.3835

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6887	0.0000	2.6887	1.1149	0.0000	1.1149	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7929	9.0470	6.0847	8.0200e-003		0.4312	0.4312		0.3967	0.3967	0.0000	744.5610	744.5610	0.2281	0.0000	749.3517
Total	0.7929	9.0470	6.0847	8.0200e-003	2.6887	0.4312	3.1200	1.1149	0.3967	1.5117	0.0000	744.5610	744.5610	0.2281	0.0000	749.3517

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0336	9.2900e-003	0.0973	2.3000e-004	0.0191	1.4000e-004	0.0192	5.0800e-003	1.3000e-004	5.2100e-003	0.0000	16.3677	16.3677	8.3000e-004	0.0000	16.3851
Total	0.0336	9.2900e-003	0.0973	2.3000e-004	0.0191	1.4000e-004	0.0192	5.0800e-003	1.3000e-004	5.2100e-003	0.0000	16.3677	16.3677	8.3000e-004	0.0000	16.3851

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0486	0.0000	1.0486	0.4348	0.0000	0.4348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7919	9.0362	6.0774	8.0100e-003		0.4307	0.4307		0.3963	0.3963	0.0000	743.6752	743.6752	0.2279	0.0000	748.4603
Total	0.7919	9.0362	6.0774	8.0100e-003	1.0486	0.4307	1.4793	0.4348	0.3963	0.8311	0.0000	743.6752	743.6752	0.2279	0.0000	748.4603

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0336	9.2900e-003	0.0973	2.3000e-004	0.0191	1.4000e-004	0.0192	5.0800e-003	1.3000e-004	5.2100e-003	0.0000	16.3677	16.3677	8.3000e-004	0.0000	16.3851
Total	0.0336	9.2900e-003	0.0973	2.3000e-004	0.0191	1.4000e-004	0.0192	5.0800e-003	1.3000e-004	5.2100e-003	0.0000	16.3677	16.3677	8.3000e-004	0.0000	16.3851

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6887	0.0000	2.6887	1.1149	0.0000	1.1149	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5739	6.4594	4.5903	6.7000e-003		0.3025	0.3025		0.2783	0.2783	0.0000	611.5235	611.5235	0.1904	0.0000	615.5214
Total	0.5739	6.4594	4.5903	6.7000e-003	2.6887	0.3025	2.9912	1.1149	0.2783	1.3932	0.0000	611.5235	611.5235	0.1904	0.0000	615.5214

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0258	6.9700e-003	0.0729	1.9000e-004	0.0159	1.1000e-004	0.0161	4.2400e-003	1.1000e-004	4.3500e-003	0.0000	13.1443	13.1443	6.4000e-004	0.0000	13.1577

Total	0.0258	6.9700e-003	0.0729	1.9000e-004	0.0159	1.1000e-004	0.0161	4.2400e-003	1.1000e-004	4.3500e-003	0.0000	13.1443	13.1443	6.4000e-004	0.0000	13.1577

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0486	0.0000	1.0486	0.4348	0.0000	0.4348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5732	6.4517	4.5848	6.6900e-003		0.3021	0.3021		0.2780	0.2780	0.0000	610.7960	610.7960	0.1902	0.0000	614.7891
Total	0.5732	6.4517	4.5848	6.6900e-003	1.0486	0.3021	1.3508	0.4348	0.2780	0.7128	0.0000	610.7960	610.7960	0.1902	0.0000	614.7891

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0258	6.9700e-003	0.0729	1.9000e-004	0.0159	1.1000e-004	0.0161	4.2400e-003	1.1000e-004	4.3500e-003	0.0000	13.1443	13.1443	6.4000e-004	0.0000	13.1577
Total	0.0258	6.9700e-003	0.0729	1.9000e-004	0.0159	1.1000e-004	0.0161	4.2400e-003	1.1000e-004	4.3500e-003	0.0000	13.1443	13.1443	6.4000e-004	0.0000	13.1577

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0587	0.5117	0.3857	5.9000e-004		0.0329	0.0329		0.0309	0.0309	0.0000	52.0893	52.0893	0.0128	0.0000	52.3570
Total	0.0587	0.5117	0.3857	5.9000e-004		0.0329	0.0329		0.0309	0.0309	0.0000	52.0893	52.0893	0.0128	0.0000	52.3570

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1894	0.7738	1.5577	2.3800e-003	0.0654	0.0118	0.0771	0.0187	0.0108	0.0295	0.0000	208.7304	208.7304	1.5700e-003	0.0000	208.7635
Worker	0.9180	0.2482	2.5952	6.7800e-003	0.5671	4.0900e-003	0.5712	0.1508	3.7800e-003	0.1546	0.0000	467.7434	467.7434	0.0227	0.0000	468.2203
Total	1.1073	1.0220	4.1528	9.1600e-003	0.6325	0.0159	0.6484	0.1695	0.0146	0.1841	0.0000	676.4738	676.4738	0.0243	0.0000	676.9838

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0586	0.5111	0.3853	5.9000e-004		0.0328	0.0328		0.0309	0.0309	0.0000	52.0274	52.0274	0.0127	0.0000	52.2947
Total	0.0586	0.5111	0.3853	5.9000e-004		0.0328	0.0328		0.0309	0.0309	0.0000	52.0274	52.0274	0.0127	0.0000	52.2947

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1894	0.7738	1.5577	2.3800e-003	0.0654	0.0118	0.0771	0.0187	0.0108	0.0295	0.0000	208.7304	208.7304	1.5700e-003	0.0000	208.7635

Worker	0.9180	0.2482	2.5952	6.7800e-003	0.5671	4.0900e-003	0.5712	0.1508	3.7800e-003	0.1546	0.0000	467.7434	467.7434	0.0227	0.0000	468.2203
Total	1.1073	1.0220	4.1528	9.1600e-003	0.6325	0.0159	0.6484	0.1695	0.0146	0.1841	0.0000	676.4738	676.4738	0.0243	0.0000	676.9838

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3069	2.7359	2.2342	3.5000e-003		0.1677	0.1677		0.1577	0.1577	0.0000	305.5302	305.5302	0.0743	0.0000	307.0913
Total	0.3069	2.7359	2.2342	3.5000e-003		0.1677	0.1677		0.1577	0.1577	0.0000	305.5302	305.5302	0.0743	0.0000	307.0913

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9999	4.1761	8.7331	0.0141	0.3879	0.0645	0.4524	0.1109	0.0593	0.1702	0.0000	1,218.0892	1,218.0892	9.1000e-003	0.0000	1,218.2802
Worker	5.1211	1.3461	14.1759	0.0400	3.3641	0.0240	3.3881	0.8948	0.0222	0.9170	0.0000	2,662.1867	2,662.1867	0.1253	0.0000	2,664.8185
Total	6.1210	5.5222	22.9090	0.0541	3.7520	0.0885	3.8405	1.0056	0.0815	1.0872	0.0000	3,880.2759	3,880.2759	0.1344	0.0000	3,883.0988

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3065	2.7327	2.2316	3.4900e-003		0.1675	0.1675		0.1575	0.1575	0.0000	305.1668	305.1668	0.0743	0.0000	306.7260

Total	0.3065	2.7327	2.2316	3.4900e-003		0.1675	0.1675		0.1575	0.1575	0.0000	305.1668	305.1668	0.0743	0.0000	306.7260

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9999	4.1761	8.7331	0.0141	0.3879	0.0645	0.4524	0.1109	0.0593	0.1702	0.0000	1,218.0892	1,218.0892	9.1000e-003	0.0000	1,218.2802
Worker	5.1211	1.3461	14.1759	0.0400	3.3641	0.0240	3.3881	0.8948	0.0222	0.9170	0.0000	2,662.1867	2,662.1867	0.1253	0.0000	2,664.8185
Total	6.1210	5.5222	22.9090	0.0541	3.7520	0.0885	3.8405	1.0056	0.0815	1.0872	0.0000	3,880.2759	3,880.2759	0.1344	0.0000	3,883.0988

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973
Total	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.8099	3.6315	8.0717	0.0141	0.3894	0.0578	0.4472	0.1114	0.0532	0.1645	0.0000	1,194.8239	1,194.8239	8.8100e-003	0.0000	1,195.0089
Worker	4.8846	1.2512	13.2250	0.0401	3.3770	0.0241	3.4011	0.8982	0.0223	0.9205	0.0000	2,566.5923	2,566.5923	0.1189	0.0000	2,569.0893
Total	**5.6945**	**4.8827**	**21.2967**	**0.0543**	**3.7665**	**0.0818**	**3.8483**	**1.0095**	**0.0755**	**1.0850**	**0.0000**	**3,761.4162**	**3,761.4162**	**0.1277**	**0.0000**	**3,764.0982**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2763	2.4970	2.1993	3.5100e-003		0.1456	0.1456		0.1369	0.1369	0.0000	301.7919	301.7919	0.0735	0.0000	303.3360
Total	**0.2763**	**2.4970**	**2.1993**	**3.5100e-003**		**0.1456**	**0.1456**		**0.1369**	**0.1369**	**0.0000**	**301.7919**	**301.7919**	**0.0735**	**0.0000**	**303.3360**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.8099	3.6315	8.0717	0.0141	0.3894	0.0578	0.4472	0.1114	0.0532	0.1645	0.0000	1,194.8239	1,194.8239	8.8100e-003	0.0000	1,195.0089
Worker	4.8846	1.2512	13.2250	0.0401	3.3770	0.0241	3.4011	0.8982	0.0223	0.9205	0.0000	2,566.5923	2,566.5923	0.1189	0.0000	2,569.0893
Total	**5.6945**	**4.8827**	**21.2967**	**0.0543**	**3.7665**	**0.0818**	**3.8483**	**1.0095**	**0.0755**	**1.0850**	**0.0000**	**3,761.4162**	**3,761.4162**	**0.1277**	**0.0000**	**3,764.0982**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.7268	3.0279	7.6560	0.0141	0.3881	0.0518	0.4399	*0.1110*	*0.0477*	*0.1587*	0.0000	1,189.5975	1,189.5975	8.7200e-003	0.0000	1,189.7806
Worker	4.6509	1.1641	12.3515	0.0400	3.3641	0.0241	3.3882	0.8948	0.0223	0.9171	0.0000	2,513.5081	2,513.5081	0.1128	0.0000	2,515.8763
Total	**5.3777**	**4.1920**	**20.0075**	**0.0540**	**3.7522**	**0.0759**	**3.8281**	**1.0057**	**0.0700**	**1.0757**	**0.0000**	**3,703.1056**	**3,703.1056**	**0.1215**	**0.0000**	**3,705.6569**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2468	2.2602	2.1556	3.4900e-003		0.1245	0.1245		0.1170	0.1170	0.0000	300.6757	300.6757	0.0724	0.0000	302.1969
Total	**0.2468**	**2.2602**	**2.1556**	**3.4900e-003**		**0.1245**	**0.1245**		**0.1170**	**0.1170**	**0.0000**	**300.6757**	**300.6757**	**0.0724**	**0.0000**	**302.1969**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.7268	3.0279	7.6560	0.0141	0.3881	0.0518	0.4399	0.1110	0.0477	0.1587	0.0000	1,189.5975	1,189.5975	8.7200e-003	0.0000	1,189.7806
Worker	4.6509	1.1641	12.3515	0.0400	3.3641	0.0241	3.3882	0.8948	0.0223	0.9171	0.0000	2,513.5081	2,513.5081	0.1128	0.0000	2,515.8763
Total	**5.3777**	**4.1920**	**20.0075**	**0.0540**	**3.7522**	**0.0759**	**3.8281**	**1.0057**	**0.0700**	**1.0757**	**0.0000**	**3,703.1056**	**3,703.1056**	**0.1215**	**0.0000**	**3,705.6569**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9946**	**299.9946**	**0.0718**	**0.0000**	**301.5017**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.7028	2.7001	7.4048	0.0140	0.3867	0.0507	0.4375	0.1106	0.0467	0.1573	0.0000	1,185.5175	1,185.5175	8.8200e-003	0.0000	1,185.7027
Worker	4.4388	1.0893	11.5828	0.0398	3.3512	0.0241	3.3754	0.8913	0.0224	0.9137	0.0000	2,465.3043	2,465.3043	0.1075	0.0000	2,467.5623
Total	**5.1416**	**3.7893**	**18.9875**	**0.0538**	**3.7380**	**0.0748**	**3.8128**	**1.0019**	**0.0691**	**1.0710**	**0.0000**	**3,650.8218**	**3,650.8218**	**0.1164**	**0.0000**	**3,653.2651**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	0.2206	2.0173	2.1201	3.4800e-003		0.1046	0.1046		0.0984	0.0984	0.0000	299.6377	299.6377	0.0717	0.0000	301.1430
Total	0.2206	2.0173	2.1201	3.4800e-003		0.1046	0.1046		0.0984	0.0984	0.0000	299.6377	299.6377	0.0717	0.0000	301.1430

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.7028	2.7001	7.4048	0.0140	0.3867	0.0507	0.4375	0.1106	0.0467	0.1573	0.0000	1,185.5175	1,185.5175	8.8200e-003	0.0000	1,185.7027
Worker	4.4388	1.0893	11.5828	0.0398	3.3512	0.0241	3.3754	0.8913	0.0224	0.9137	0.0000	2,465.3043	2,465.3043	0.1075	0.0000	2,467.5623
Total	5.1416	3.7893	18.9875	0.0538	3.7380	0.0748	3.8128	1.0019	0.0691	1.0710	0.0000	3,650.8218	3,650.8218	0.1164	0.0000	3,653.2651

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
Total	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6601	2.4370	7.0725	0.0140	0.3869	0.0476	0.4345	0.1107	0.0438	0.1544	0.0000	1,185.3282	1,185.3282	8.3800e-003	0.0000	1,185.5040
Worker	4.2638	1.0288	10.9523	0.0398	3.3512	0.0243	3.3755	0.8913	0.0225	0.9139	0.0000	2,430.9476	2,430.9476	0.1034	0.0000	2,433.1196
Total	**4.9239**	**3.4658**	**18.0248**	**0.0538**	**3.7381**	**0.0719**	**3.8100**	**1.0020**	**0.0663**	**1.0683**	**0.0000**	**3,616.2757**	**3,616.2757**	**0.1118**	**0.0000**	**3,618.6236**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2034	1.8584	2.1047	3.4800e-003		0.0905	0.0905		0.0851	0.0851	0.0000	299.7410	299.7410	0.0712	0.0000	301.2361
Total	**0.2034**	**1.8584**	**2.1047**	**3.4800e-003**		**0.0905**	**0.0905**		**0.0851**	**0.0851**	**0.0000**	**299.7410**	**299.7410**	**0.0712**	**0.0000**	**301.2361**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6601	2.4370	7.0725	0.0140	0.3869	0.0476	0.4345	0.1107	0.0438	0.1544	0.0000	1,185.3282	1,185.3282	8.3800e-003	0.0000	1,185.5040
Worker	4.2638	1.0288	10.9523	0.0398	3.3512	0.0243	3.3755	0.8913	0.0225	0.9139	0.0000	2,430.9476	2,430.9476	0.1034	0.0000	2,433.1196
Total	**4.9239**	**3.4658**	**18.0248**	**0.0538**	**3.7381**	**0.0719**	**3.8100**	**1.0020**	**0.0663**	**1.0683**	**0.0000**	**3,616.2757**	**3,616.2757**	**0.1118**	**0.0000**	**3,618.6236**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6557	2.4277	6.9734	0.0141	0.3900	0.0482	0.4382	0.1116	0.0443	0.1559	0.0000	1,195.8264	1,195.8264	8.4800e-003	0.0000	1,196.0045
Worker	4.1380	0.9852	10.5118	0.0401	3.3770	0.0247	3.4017	0.8982	0.0229	0.9211	0.0000	2,419.1699	2,419.1699	0.1007	0.0000	2,421.2852
Total	4.7937	3.4129	17.4852	0.0542	3.7670	0.0729	3.8399	1.0097	0.0672	1.0770	0.0000	3,614.9963	3,614.9963	0.1092	0.0000	3,617.2897

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1917	1.7504	2.1109	3.5100e-003		0.0799	0.0799		0.0752	0.0752	0.0000	302.1048	302.1048	0.0713	0.0000	303.6027
Total	0.1917	1.7504	2.1109	3.5100e-003		0.0799	0.0799		0.0752	0.0752	0.0000	302.1048	302.1048	0.0713	0.0000	303.6027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6557	2.4277	6.9734	0.0141	0.3900	0.0482	0.4382	0.1116	0.0443	0.1559	0.0000	1,195.8264	1,195.8264	8.4800e-003	0.0000	1,196.0045
Worker	4.1380	0.9852	10.5118	0.0401	3.3770	0.0247	3.4017	0.8982	0.0229	0.9211	0.0000	2,419.1699	2,419.1699	0.1007	0.0000	2,421.2852
Total	4.7937	3.4129	17.4852	0.0542	3.7670	0.0729	3.8399	1.0097	0.0672	1.0770	0.0000	3,614.9963	3,614.9963	0.1092	0.0000	3,617.2897

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6438	2.3921	6.8002	0.0141	0.3886	0.0482	0.4368	0.1112	0.0443	0.1555	0.0000	1,192.2861	1,192.2861	8.4700e-003	0.0000	1,192.4640
Worker	3.9879	0.9388	10.0415	0.0400	3.3641	0.0248	3.3889	0.8948	0.0230	0.9178	0.0000	2,383.5569	2,383.5569	0.0975	0.0000	2,385.6035
Total	4.6317	3.3309	16.8417	0.0540	3.7528	0.0730	3.8257	1.0059	0.0673	1.0733	0.0000	3,575.8430	3,575.8430	0.1059	0.0000	3,578.0676

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1775	1.6175	2.0923	3.5000e-003		0.0684	0.0684		0.0644	0.0644	0.0000	301.0433	301.0433	0.0707	0.0000	302.5271
Total	0.1775	1.6175	2.0923	3.5000e-003		0.0684	0.0684		0.0644	0.0644	0.0000	301.0433	301.0433	0.0707	0.0000	302.5271

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6438	2.3921	6.8002	0.0141	0.3886	0.0482	0.4368	0.1112	0.0443	0.1555	0.0000	1,192.2861	1,192.2861	8.4700e-003	0.0000	1,192.4640
Worker	3.9879	0.9388	10.0415	0.0400	3.3641	0.0248	3.3889	0.8948	0.0230	0.9178	0.0000	2,383.5569	2,383.5569	0.0975	0.0000	2,385.6035
Total	4.6317	3.3309	16.8417	0.0540	3.7528	0.0730	3.8257	1.0059	0.0673	1.0733	0.0000	3,575.8430	3,575.8430	0.1059	0.0000	3,578.0676

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6399	2.3646	6.6827	0.0141	0.3887	0.0482	0.4369	0.1112	0.0443	0.1555	0.0000	1,193.3491	1,193.3491	8.4900e-003	0.0000	1,193.5273
Worker	3.8666	0.9032	9.6831	0.0400	3.3641	0.0251	3.3892	0.8948	0.0233	0.9180	0.0000	2,361.0515	2,361.0515	0.0951	0.0000	2,363.0477
Total	**4.5065**	**3.2677**	**16.3658**	**0.0540**	**3.7529**	**0.0732**	**3.8261**	**1.0060**	**0.0676**	**1.0736**	**0.0000**	**3,554.4006**	**3,554.4006**	**0.1036**	**0.0000**	**3,556.5750**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1775	1.6175	2.0923	3.5000e-003		0.0684	0.0684		0.0644	0.0644	0.0000	301.0433	301.0433	0.0707	0.0000	302.5271
Total	**0.1775**	**1.6175**	**2.0923**	**3.5000e-003**		**0.0684**	**0.0684**		**0.0644**	**0.0644**	**0.0000**	**301.0433**	**301.0433**	**0.0707**	**0.0000**	**302.5271**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6399	2.3646	6.6827	0.0141	0.3887	0.0482	0.4369	0.1112	0.0443	0.1555	0.0000	1,193.3491	1,193.3491	8.4900e-003	0.0000	1,193.5273
Worker	3.8666	0.9032	9.6831	0.0400	3.3641	0.0251	3.3892	0.8948	0.0233	0.9180	0.0000	2,361.0515	2,361.0515	0.0951	0.0000	2,363.0477
Total	**4.5065**	**3.2677**	**16.3658**	**0.0540**	**3.7529**	**0.0732**	**3.8261**	**1.0060**	**0.0676**	**1.0736**	**0.0000**	**3,554.4006**	**3,554.4006**	**0.1036**	**0.0000**	**3,556.5750**

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6404	2.3430	6.5943	0.0141	0.3888	0.0483	0.4371	0.1113	0.0444	0.1557	0.0000	1,194.3358	1,194.3358	8.5100e-003	0.0000	1,194.5144
Worker	3.7496	0.8716	9.3666	0.0400	3.3641	0.0253	3.3894	0.8948	0.0235	0.9182	0.0000	2,341.5800	2,341.5800	0.0929	0.0000	2,343.5309
Total	4.3901	3.2146	15.9609	0.0541	3.7530	0.0736	3.8265	1.0060	0.0679	1.0739	0.0000	3,535.9158	3,535.9158	0.1014	0.0000	3,538.0454

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1775	1.6175	2.0923	3.5000e-003		0.0684	0.0684		0.0644	0.0644	0.0000	301.0433	301.0433	0.0707	0.0000	302.5271
Total	0.1775	1.6175	2.0923	3.5000e-003		0.0684	0.0684		0.0644	0.0644	0.0000	301.0433	301.0433	0.0707	0.0000	302.5271

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6404	2.3430	6.5943	0.0141	0.3888	0.0483	0.4371	0.1113	0.0444	0.1557	0.0000	1,194.3358	1,194.3358	8.5100e-003	0.0000	1,194.5144
Worker	3.7496	0.8716	9.3666	0.0400	3.3641	0.0253	3.3894	0.8948	0.0235	0.9182	0.0000	2,341.5800	2,341.5800	0.0929	0.0000	2,343.5309
Total	4.3901	3.2146	15.9609	0.0541	3.7530	0.0736	3.8265	1.0060	0.0679	1.0739	0.0000	3,535.9158	3,535.9158	0.1014	0.0000	3,538.0454

3.5 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1770	1.6133	2.0867	3.4900e-003		0.0683	0.0683		0.0642	0.0642	0.0000	300.2471	300.2471	0.0705	0.0000	301.7269
Total	0.1770	1.6133	2.0867	3.4900e-003		0.0683	0.0683		0.0642	0.0642	0.0000	300.2471	300.2471	0.0705	0.0000	301.7269

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6331	2.3144	6.4622	0.0140	0.3874	0.0481	0.4355	0.1109	0.0443	0.1551	0.0000	1,190.5030	1,190.5030	8.4900e-003	0.0000	1,190.6813
Worker	3.6247	0.8401	9.0555	0.0398	3.3512	0.0254	3.3767	0.8913	0.0236	0.9149	0.0000	2,316.0043	2,316.0043	0.0906	0.0000	2,317.9074
Total	4.2578	3.1545	15.5177	0.0539	3.7387	0.0735	3.8122	1.0022	0.0678	1.0700	0.0000	3,506.5074	3,506.5074	0.0991	0.0000	3,508.5887

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1768	1.6113	2.0843	3.4900e-003		0.0682	0.0682		0.0641	0.0641	0.0000	299.8899	299.8899	0.0704	0.0000	301.3680
Total	0.1768	1.6113	2.0843	3.4900e-003		0.0682	0.0682		0.0641	0.0641	0.0000	299.8899	299.8899	0.0704	0.0000	301.3680

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6331	2.3144	6.4622	0.0140	0.3874	0.0481	0.4355	0.1109	0.0443	0.1551	0.0000	1,190.5030	1,190.5030	8.4900e-003	0.0000	1,190.6813
Worker	3.6247	0.8401	9.0555	0.0398	3.3512	0.0254	3.3767	0.8913	0.0236	0.9149	0.0000	2,316.0043	2,316.0043	0.0906	0.0000	2,317.9074
Total	4.2578	3.1545	15.5177	0.0539	3.7387	0.0735	3.8122	1.0022	0.0678	1.0700	0.0000	3,506.5074	3,506.5074	0.0991	0.0000	3,508.5887

3.5 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6336	2.3070	6.4140	0.0141	0.3890	0.0483	0.4373	0.1113	0.0445	0.1558	0.0000	1,195.7649	1,195.7649	8.5300e-003	0.0000	1,195.9441
Worker	3.5277	0.8163	8.8247	0.0400	3.3641	0.0257	3.3898	0.8948	0.0238	0.9186	0.0000	2,310.6403	2,310.6403	0.0891	0.0000	2,312.5118
Total	**4.1613**	**3.1233**	**15.2386**	**0.0541**	**3.7531**	**0.0740**	**3.8271**	**1.0061**	**0.0683**	**1.0743**	**0.0000**	**3,506.4052**	**3,506.4052**	**0.0977**	**0.0000**	**3,508.4559**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1775	1.6175	2.0923	3.5000e-003		0.0684	0.0684		0.0644	0.0644	0.0000	301.0433	301.0433	0.0707	0.0000	302.5271
Total	**0.1775**	**1.6175**	**2.0923**	**3.5000e-003**		**0.0684**	**0.0684**		**0.0644**	**0.0644**	**0.0000**	**301.0433**	**301.0433**	**0.0707**	**0.0000**	**302.5271**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6336	2.3070	6.4140	0.0141	0.3890	0.0483	0.4373	0.1113	0.0445	0.1558	0.0000	1,195.7649	1,195.7649	8.5300e-003	0.0000	1,195.9441
Worker	3.5277	0.8163	8.8247	0.0400	3.3641	0.0257	3.3898	0.8948	0.0238	0.9186	0.0000	2,310.6403	2,310.6403	0.0891	0.0000	2,312.5118

Total	4.1613	3.1233	15.2386	0.0541	3.7531	0.0740	3.8271	1.0061	0.0683	1.0743	0.0000	3,506.4052	3,506.4052	0.0977	0.0000	3,508.4558

3.5 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5281	341.5281	0.0137	0.0000	341.8160
Total	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5281	341.5281	0.0137	0.0000	341.8160

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6339	2.2922	6.3838	0.0141	0.3891	0.0484	0.4374	0.1114	0.0445	0.1558	0.0000	1,196.4735	1,196.4735	8.5400e-003	0.0000	1,196.6529
Worker	3.4214	0.7917	8.5934	0.0400	3.3641	0.0258	3.3899	0.8948	0.0239	0.9187	0.0000	2,298.5721	2,298.5721	0.0874	0.0000	2,300.4079
Total	4.0553	3.0839	14.9772	0.0541	3.7532	0.0741	3.8274	1.0061	0.0684	1.0745	0.0000	3,495.0457	3,495.0457	0.0960	0.0000	3,497.0608

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1700	1.0321	2.1026	4.0200e-003		0.0192	0.0192		0.0192	0.0192	0.0000	341.1218	341.1218	0.0137	0.0000	341.4094
Total	0.1700	1.0321	2.1026	4.0200e-003		0.0192	0.0192		0.0192	0.0192	0.0000	341.1218	341.1218	0.0137	0.0000	341.4094

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6339	2.2922	6.3838	0.0141	0.3891	0.0484	0.4374	0.1114	0.0445	0.1558	0.0000	1,196.4735	1,196.4735	8.5400e-003	0.0000	1,196.6529
Worker	3.4214	0.7917	8.5934	0.0400	3.3641	0.0258	3.3899	0.8948	0.0239	0.9187	0.0000	2,298.5721	2,298.5721	0.0874	0.0000	2,300.4079
Total	**4.0553**	**3.0839**	**14.9772**	**0.0541**	**3.7532**	**0.0741**	**3.8274**	**1.0061**	**0.0684**	**1.0745**	**0.0000**	**3,495.0457**	**3,495.0457**	**0.0960**	**0.0000**	**3,497.0608**

3.5 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5281	341.5281	0.0137	0.0000	341.8160
Total	**0.1702**	**1.0333**	**2.1051**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.5281**	**341.5281**	**0.0137**	**0.0000**	**341.8160**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6351	2.2804	6.3578	0.0141	0.3892	0.0484	0.4376	0.1114	0.0445	0.1559	0.0000	1,197.2800	1,197.2800	8.5500e-003	0.0000	1,197.4596

Worker	3.3229	0.7689	8.3833	0.0400	3.3641	0.0259	3.3900	0.8948	0.0240	0.9187	0.0000	2,288.4804	2,288.4804	0.0859	0.0000	2,290.2838
Total	3.9580	3.0492	14.7411	0.0541	3.7533	0.0743	3.8276	1.0062	0.0685	1.0747	0.0000	3,485.7604	3,485.7604	0.0944	0.0000	3,487.7434

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1700	1.0321	2.1026	4.0200e-003		0.0192	0.0192		0.0192	0.0192	0.0000	341.1218	341.1218	0.0137	0.0000	341.4094
Total	0.1700	1.0321	2.1026	4.0200e-003		0.0192	0.0192		0.0192	0.0192	0.0000	341.1218	341.1218	0.0137	0.0000	341.4094

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6351	2.2804	6.3578	0.0141	0.3892	0.0484	0.4376	0.1114	0.0445	0.1559	0.0000	1,197.2800	1,197.2800	8.5500e-003	0.0000	1,197.4596
Worker	3.3229	0.7689	8.3833	0.0400	3.3641	0.0259	3.3900	0.8948	0.0240	0.9187	0.0000	2,288.4804	2,288.4804	0.0859	0.0000	2,290.2838
Total	3.9580	3.0492	14.7411	0.0541	3.7533	0.0743	3.8276	1.0062	0.0685	1.0747	0.0000	3,485.7604	3,485.7604	0.0944	0.0000	3,487.7434

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1708	1.0372	2.1132	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	342.8367	342.8367	0.0138	0.0000	343.1257

Total	0.1708	1.0372	2.1132	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	342.8367	342.8367	0.0138	0.0000	343.1257

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6375	2.2787	6.3595	0.0142	0.3908	0.0486	0.4394	0.1119	0.0448	0.1566	0.0000	1,202.6246	1,202.6246	8.6000e-003	0.0000	1,202.8051
Worker	3.2453	0.7520	8.2360	0.0401	3.3770	0.0260	3.4030	0.8982	0.0241	0.9223	0.0000	2,288.8190	2,288.8190	0.0848	0.0000	2,290.6007
Total	**3.8827**	**3.0307**	**14.5954**	**0.0543**	**3.7678**	**0.0747**	**3.8425**	**1.0101**	**0.0689**	**1.0789**	**0.0000**	**3,491.4436**	**3,491.4436**	**0.0934**	**0.0000**	**3,493.4059**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1706	1.0360	2.1107	4.0300e-003		0.0193	0.0193		0.0193	0.0193	0.0000	342.4288	342.4288	0.0138	0.0000	342.7175
Total	0.1706	1.0360	2.1107	4.0300e-003		0.0193	0.0193		0.0193	0.0193	0.0000	342.4288	342.4288	0.0138	0.0000	342.7175

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.6375	2.2787	6.3595	0.0142	0.3908	0.0486	0.4394	0.1119	0.0448	0.1566	0.0000	1,202.6246	1,202.6246	8.6000e-003	0.0000	1,202.8051
Worker	3.2453	0.7520	8.2360	0.0401	3.3770	0.0260	3.4030	0.8982	0.0241	0.9223	0.0000	2,288.8190	2,288.8190	0.0848	0.0000	2,290.6007
Total	**3.8827**	**3.0307**	**14.5954**	**0.0543**	**3.7678**	**0.0747**	**3.8425**	**1.0101**	**0.0689**	**1.0789**	**0.0000**	**3,491.4436**	**3,491.4436**	**0.0934**	**0.0000**	**3,493.4059**

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2196	340.2196	0.0137	0.0000	340.5064
Total	**0.1695**	**1.0293**	**2.0971**	**4.0100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**	**0.0000**	**340.2196**	**340.2196**	**0.0137**	**0.0000**	**340.5064**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6333	2.2515	6.2953	0.0141	0.3879	0.0483	0.4362	0.1111	0.0444	0.1555	0.0000	1,194.1442	1,194.1442	8.5400e-003	0.0000	1,194.3235
Worker	3.1415	0.7301	8.0281	0.0398	3.3512	0.0259	3.3771	0.8913	0.0240	0.9153	0.0000	2,264.4321	2,264.4321	0.0831	0.0000	2,266.1764
Total	**3.7748**	**2.9817**	**14.3233**	**0.0539**	**3.7391**	**0.0742**	**3.8133**	**1.0024**	**0.0684**	**1.0708**	**0.0000**	**3,458.5763**	**3,458.5763**	**0.0916**	**0.0000**	**3,460.4999**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.1693	1.0281	2.0946	4.0000e-003		0.0192	0.0192		0.0192	0.0192	0.0000	339.8149	339.8149	0.0136	0.0000	340.1013
Total	0.1693	1.0281	2.0946	4.0000e-003		0.0192	0.0192		0.0192	0.0192	0.0000	339.8149	339.8149	0.0136	0.0000	340.1013

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6333	2.2515	6.2953	0.0141	0.3879	0.0483	0.4362	0.1111	0.0444	0.1555	0.0000	1,194.1442	1,194.1442	8.5400e-003	0.0000	1,194.3235
Worker	3.1415	0.7301	8.0281	0.0398	3.3512	0.0259	3.3771	0.8913	0.0240	0.9153	0.0000	2,264.4321	2,264.4321	0.0831	0.0000	2,266.1764
Total	3.7748	2.9817	14.3233	0.0539	3.7391	0.0742	3.8133	1.0024	0.0684	1.0708	0.0000	3,458.5763	3,458.5763	0.0916	0.0000	3,460.4999

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2196	340.2196	0.0137	0.0000	340.5064
Total	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2196	340.2196	0.0137	0.0000	340.5064

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6339	2.2429	6.2782	0.0141	0.3880	0.0483	0.4363	0.1111	0.0445	0.1556	0.0000	1,194.8262	1,194.8262	8.5500e-003	0.0000	1,195.0057
Worker	3.0462	0.7163	7.8877	0.0398	3.3512	0.0259	3.3771	0.8913	0.0240	0.9153	0.0000	2,258.5778	2,258.5778	0.0820	0.0000	2,260.2995
Total	**3.6801**	**2.9591**	**14.1659**	**0.0539**	**3.7392**	**0.0742**	**3.8134**	**1.0024**	**0.0685**	**1.0709**	**0.0000**	**3,453.4040**	**3,453.4040**	**0.0905**	**0.0000**	**3,455.3052**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1693	1.0281	2.0946	4.0000e-003		0.0192	0.0192		0.0192	0.0192	0.0000	339.8149	339.8149	0.0136	0.0000	340.1013
Total	**0.1693**	**1.0281**	**2.0946**	**4.0000e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**	**0.0000**	**339.8149**	**339.8149**	**0.0136**	**0.0000**	**340.1013**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6339	2.2429	6.2782	0.0141	0.3880	0.0483	0.4363	0.1111	0.0445	0.1556	0.0000	1,194.8262	1,194.8262	8.5500e-003	0.0000	1,195.0057
Worker	3.0462	0.7163	7.8877	0.0398	3.3512	0.0259	3.3771	0.8913	0.0240	0.9153	0.0000	2,258.5778	2,258.5778	0.0820	0.0000	2,260.2995
Total	**3.6801**	**2.9591**	**14.1659**	**0.0539**	**3.7392**	**0.0742**	**3.8134**	**1.0024**	**0.0685**	**1.0709**	**0.0000**	**3,453.4040**	**3,453.4040**	**0.0905**	**0.0000**	**3,455.3052**

3.5 Building Construction - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	0.1582	0.9332	2.1000	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.5281	341.5281	0.0127	0.0000	341.7954
Total	0.1582	0.9332	2.1000	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.5281	341.5281	0.0127	0.0000	341.7954

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6355	2.2437	6.2832	0.0141	0.3896	0.0485	0.4381	0.1116	0.0447	0.1562	0.0000	1,200.0159	1,200.0159	8.5900e-003	0.0000	1,200.1962
Worker	2.9738	0.7081	7.7973	0.0400	3.3641	0.0260	3.3901	0.8948	0.0241	0.9188	0.0000	2,262.4062	2,262.4062	0.0814	0.0000	2,264.1150
Total	3.6093	2.9518	14.0805	0.0541	3.7537	0.0745	3.8282	1.0063	0.0687	1.0750	0.0000	3,462.4221	3,462.4221	0.0900	0.0000	3,464.3112

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1580	0.9321	2.0975	4.0200e-003		0.0117	0.0117		0.0117	0.0117	0.0000	341.1218	341.1218	0.0127	0.0000	341.3888
Total	0.1580	0.9321	2.0975	4.0200e-003		0.0117	0.0117		0.0117	0.0117	0.0000	341.1218	341.1218	0.0127	0.0000	341.3888

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6355	2.2437	6.2832	0.0141	0.3896	0.0485	0.4381	0.1116	0.0447	0.1562	0.0000	1,200.0159	1,200.0159	8.5900e-003	0.0000	1,200.1962
Worker	2.9738	0.7081	7.7973	0.0400	3.3641	0.0260	3.3901	0.8948	0.0241	0.9188	0.0000	2,262.4062	2,262.4062	0.0814	0.0000	2,264.1150
Total	3.6093	2.9518	14.0805	0.0541	3.7537	0.0745	3.8282	1.0063	0.0687	1.0750	0.0000	3,462.4221	3,462.4221	0.0900	0.0000	3,464.3112

3.5 Building Construction - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1588	0.9368	2.1081	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	342.8367	342.8367	0.0128	0.0000	343.1050
Total	0.1588	0.9368	2.1081	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	342.8367	342.8367	0.0128	0.0000	343.1050

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2816	0.0000	0.2816	0.0691	0.0000	0.0691	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.9189	0.0000	2.9189	0.7164	0.0000	0.7164	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					3.2005	0.0000	3.2005	0.7856	0.0000	0.7856	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1586	0.9357	2.1056	4.0300e-003		0.0118	0.0118		0.0118	0.0118	0.0000	342.4288	342.4288	0.0128	0.0000	342.6968
Total	0.1586	0.9357	2.1056	4.0300e-003		0.0118	0.0118		0.0118	0.0118	0.0000	342.4288	342.4288	0.0128	0.0000	342.6968

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2816	0.0000	0.2816	0.0691	0.0000	0.0691	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.9189	0.0000	2.9189	0.7164	0.0000	0.7164	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					3.2005	0.0000	3.2005	0.7856	0.0000	0.7856	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.5 Building Construction - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1582	0.9332	2.1000	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.5281	341.5281	0.0127	0.0000	341.7954
Total	0.1582	0.9332	2.1000	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.5281	341.5281	0.0127	0.0000	341.7954

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2805	0.0000	0.2805	0.0689	0.0000	0.0689	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.9077	0.0000	2.9077	0.7137	0.0000	0.7137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**3.1883**	**0.0000**	**3.1883**	**0.7826**	**0.0000**	**0.7826**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1580	0.9321	2.0975	4.0200e-003		0.0117	0.0117		0.0117	0.0117	0.0000	341.1218	341.1218	0.0127	0.0000	341.3888
Total	**0.1580**	**0.9321**	**2.0975**	**4.0200e-003**		**0.0117**	**0.0117**		**0.0117**	**0.0117**	**0.0000**	**341.1218**	**341.1218**	**0.0127**	**0.0000**	**341.3888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2805	0.0000	0.2805	0.0689	0.0000	0.0689	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.9077	0.0000	2.9077	0.7137	0.0000	0.7137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**3.1883**	**0.0000**	**3.1883**	**0.7826**	**0.0000**	**0.7826**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1582	0.9332	2.1000	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.5281	341.5281	0.0127	0.0000	341.7954
Total	0.1582	0.9332	2.1000	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.5281	341.5281	0.0127	0.0000	341.7954

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2805	0.0000	0.2805	0.0689	0.0000	0.0689	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.9077	0.0000	2.9077	0.7137	0.0000	0.7137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					3.1883	0.0000	3.1883	0.7826	0.0000	0.7826	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1580	0.9321	2.0975	4.0200e-003		0.0117	0.0117		0.0117	0.0117	0.0000	341.1218	341.1218	0.0127	0.0000	341.3888
Total	0.1580	0.9321	2.0975	4.0200e-003		0.0117	0.0117		0.0117	0.0117	0.0000	341.1218	341.1218	0.0127	0.0000	341.3888

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2805	0.0000	0.2805	0.0689	0.0000	0.0689	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.9077	0.0000	2.9077	0.7137	0.0000	0.7137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**3.1883**	**0.0000**	**3.1883**	**0.7826**	**0.0000**	**0.7826**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2039

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1576	0.9296	2.0920	4.0100e-003		0.0117	0.0117		0.0117	0.0117	0.0000	340.2196	340.2196	0.0127	0.0000	340.4859
Total	**0.1576**	**0.9296**	**2.0920**	**4.0100e-003**		**0.0117**	**0.0117**		**0.0117**	**0.0117**	**0.0000**	**340.2196**	**340.2196**	**0.0127**	**0.0000**	**340.4859**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2795	0.0000	0.2795	0.0686	0.0000	0.0686	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.8966	0.0000	2.8966	0.7110	0.0000	0.7110	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**3.1760**	**0.0000**	**3.1760**	**0.7796**	**0.0000**	**0.7796**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1574	0.9285	2.0895	4.0000e-003		0.0117	0.0117		0.0117	0.0117	0.0000	339.8149	339.8149	0.0127	0.0000	340.0808
Total	0.1574	0.9285	2.0895	4.0000e-003		0.0117	0.0117		0.0117	0.0117	0.0000	339.8149	339.8149	0.0127	0.0000	340.0808

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2795	0.0000	0.2795	0.0686	0.0000	0.0686	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.8966	0.0000	2.8966	0.7110	0.0000	0.7110	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					3.1760	0.0000	3.1760	0.7796	0.0000	0.7796	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.5 Building Construction - 2040

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1556	0.8982	2.1001	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.5282	341.5282	0.0123	0.0000	341.7861
Total	0.1556	0.8982	2.1001	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.5282	341.5282	0.0123	0.0000	341.7861

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2805	0.0000	0.2805	0.0689	0.0000	0.0689	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.9077	0.0000	2.9077	0.7137	0.0000	0.7137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					3.1883	0.0000	3.1883	0.7826	0.0000	0.7826	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1555	0.8971	2.0976	4.0200e-003		9.5700e-003	9.5700e-003		9.5700e-003	9.5700e-003	0.0000	341.1219	341.1219	0.0123	0.0000	341.3795
Total	0.1555	0.8971	2.0976	4.0200e-003		9.5700e-003	9.5700e-003		9.5700e-003	9.5700e-003	0.0000	341.1219	341.1219	0.0123	0.0000	341.3795

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2805	0.0000	0.2805	0.0689	0.0000	0.0689	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.9077	0.0000	2.9077	0.7137	0.0000	0.7137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					3.1883	0.0000	3.1883	0.7826	0.0000	0.7826	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.5 Building Construction - 2041

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1556	0.8982	2.1001	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.5282	341.5282	0.0123	0.0000	341.7861
Total	0.1556	0.8982	2.1001	4.0200e-003		9.5800e-003	9.5800e-003		9.5800e-003	9.5800e-003	0.0000	341.5282	341.5282	0.0123	0.0000	341.7861

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2805	0.0000	0.2805	0.0689	0.0000	0.0689	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.9077	0.0000	2.9077	0.7137	0.0000	0.7137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					3.1883	0.0000	3.1883	0.7826	0.0000	0.7826	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1555	0.8971	2.0976	4.0200e-003		9.5700e-003	9.5700e-003		9.5700e-003	9.5700e-003	0.0000	341.1219	341.1219	0.0123	0.0000	341.3795
Total	0.1555	0.8971	2.0976	4.0200e-003		9.5700e-003	9.5700e-003		9.5700e-003	9.5700e-003	0.0000	341.1219	341.1219	0.0123	0.0000	341.3795

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.2805	0.0000	0.2805	0.0689	0.0000	0.0689	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.9077	0.0000	2.9077	0.7137	0.0000	0.7137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					3.1883	0.0000	3.1883	0.7826	0.0000	0.7826	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.5 Building Construction - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0924	0.5334	1.2472	2.3900e-003		5.6900e-003	5.6900e-003		5.6900e-003	5.6900e-003	0.0000	202.8232	202.8232	7.2900e-003	0.0000	202.9764
Total	0.0924	0.5334	1.2472	2.3900e-003		5.6900e-003	5.6900e-003		5.6900e-003	5.6900e-003	0.0000	202.8232	202.8232	7.2900e-003	0.0000	202.9764

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.1666	0.0000	0.1666	0.0409	0.0000	0.0409	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					1.7268	0.0000	1.7268	0.4239	0.0000	0.4239	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total					1.8934	0.0000	1.8934	0.4647	0.0000	0.4647	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0923	0.5328	1.2457	2.3900e-003		5.6800e-003	5.6800e-003		5.6800e-003	5.6800e-003	0.0000	202.5820	202.5820	7.2900e-003	0.0000	202.7350
Total	0.0923	0.5328	1.2457	2.3900e-003		5.6800e-003	5.6800e-003		5.6800e-003	5.6800e-003	0.0000	202.5820	202.5820	7.2900e-003	0.0000	202.7350

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.1666	0.0000	0.1666	0.0409	0.0000	0.0409	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					1.7268	0.0000	1.7268	0.4239	0.0000	0.4239	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					1.8934	0.0000	1.8934	0.4647	0.0000	0.4647	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0525	0.1908	0.8209	1.4500e-003		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003	0.0000	125.0094	125.0094	4.2000e-003	0.0000	125.0977
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	0.0525	0.1908	0.8209	1.4500e-003		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003	0.0000	125.0094	125.0094	4.2000e-003	0.0000	125.0977

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					5.0500e-003	0.0000	5.0500e-003	1.2400e-003	0.0000	1.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					5.0500e-003	0.0000	5.0500e-003	1.2400e-003	0.0000	1.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0524	0.1906	0.8199	1.4500e-003		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	124.8607	124.8607	4.2000e-003	0.0000	124.9489
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0524	0.1906	0.8199	1.4500e-003		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	124.8607	124.8607	4.2000e-003	0.0000	124.9489

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker					5.0500e-003	0.0000	5.0500e-003	1.2400e-003	0.0000	1.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**5.0500e-003**	**0.0000**	**5.0500e-003**	**1.2400e-003**	**0.0000**	**1.2400e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2043

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1292	0.4698	2.0212	3.5800e-003		0.0149	0.0149		0.0149	0.0149	0.0000	307.8062	307.8062	0.0104	0.0000	308.0235
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1292**	**0.4698**	**2.0212**	**3.5800e-003**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**307.8062**	**307.8062**	**0.0104**	**0.0000**	**308.0235**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0124	0.0000	0.0124	3.0500e-003	0.0000	3.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.0124**	**0.0000**	**0.0124**	**3.0500e-003**	**0.0000**	**3.0500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1291	0.4692	2.0188	3.5800e-003		0.0148	0.0148		0.0148	0.0148	0.0000	307.4400	307.4400	0.0103	0.0000	307.6571

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1291	0.4692	2.0188	3.5800e-003		0.0148	0.0148		0.0148	0.0148	0.0000	307.4400	307.4400	0.0103	0.0000	307.6571

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0124	0.0000	0.0124	3.0500e-003	0.0000	3.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.0124	0.0000	0.0124	3.0500e-003	0.0000	3.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2044

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0361	0.1314	0.5653	1.0000e-003		4.1500e-003	4.1500e-003		4.1500e-003	4.1500e-003	0.0000	86.0914	86.0914	2.8900e-003	0.0000	86.1522
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0361	0.1314	0.5653	1.0000e-003		4.1500e-003	4.1500e-003		4.1500e-003	4.1500e-003	0.0000	86.0914	86.0914	2.8900e-003	0.0000	86.1522

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					3.4800e-003	0.0000	3.4800e-003	8.5000e-004	0.0000	8.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**3.4800e-003**	**0.0000**	**3.4800e-003**	**8.5000e-004**	**0.0000**	**8.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0361	0.1312	0.5646	1.0000e-003		4.1500e-003	4.1500e-003		4.1500e-003	4.1500e-003	0.0000	85.9890	85.9890	2.8900e-003	0.0000	86.0497
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0361**	**0.1312**	**0.5646**	**1.0000e-003**		**4.1500e-003**	**4.1500e-003**		**4.1500e-003**	**4.1500e-003**	**0.0000**	**85.9890**	**85.9890**	**2.8900e-003**	**0.0000**	**86.0497**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					3.4800e-003	0.0000	3.4800e-003	8.5000e-004	0.0000	8.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**3.4800e-003**	**0.0000**	**3.4800e-003**	**8.5000e-004**	**0.0000**	**8.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2044

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.0108	0.0683	0.1685	2.8000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	24.0006	24.0006	8.4000e-004	0.0000	24.0183
Total	0.0108	0.0683	0.1685	2.8000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	24.0006	24.0006	8.4000e-004	0.0000	24.0183

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.4189	0.0000	0.4189	0.1028	0.0000	0.1028	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.4189	0.0000	0.4189	0.1028	0.0000	0.1028	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0108	0.0683	0.1683	2.8000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	23.9720	23.9720	8.4000e-004	0.0000	23.9898
Total	0.0108	0.0683	0.1683	2.8000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	23.9720	23.9720	8.4000e-004	0.0000	23.9898

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.4189	0.0000	0.4189	0.1028	0.0000	0.1028	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.4189**	**0.0000**	**0.4189**	**0.1028**	**0.0000**	**0.1028**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2045

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.0916	0.2258	3.7000e-004		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	32.1710	32.1710	1.1300e-003	0.0000	32.1948
Total	**0.0145**	**0.0916**	**0.2258**	**3.7000e-004**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**32.1710**	**32.1710**	**1.1300e-003**	**0.0000**	**32.1948**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.5615	0.0000	0.5615	0.1378	0.0000	0.1378	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.5615**	**0.0000**	**0.5615**	**0.1378**	**0.0000**	**0.1378**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	0.0145	0.0915	0.2256	3.7000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	32.1327	32.1327	1.1300e-003	0.0000	32.1565
Total	0.0145	0.0915	0.2256	3.7000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	32.1327	32.1327	1.1300e-003	0.0000	32.1565

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.5615	0.0000	0.5615	0.1378	0.0000	0.1378	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.5615	0.0000	0.5615	0.1378	0.0000	0.1378	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	70.7074	60.0324	278.0289	0.4381	30.6601	0.8421	31.5022	8.2126	0.7725	8.9851	0.0000	36,443.0219	36,443.0219	1.8433	0.0000	36,481.7317
Unmitigated	70.8033	60.1134	278.3360	0.4388	30.7093	0.8433	31.5527	8.2258	0.7737	8.9995	0.0000	36,499.6213	36,499.6213	1.8459	0.0000	36,538.3853

4.2 Trip Summary Information

	Average Daily Trip Rate	Unmitigated	Mitigated

Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	32,126.25	34,905.00	29591.25	82,528,815	82,396,552
Total	32,126.25	34,905.00	29,591.25	82,528,815	82,396,552

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504217	0.068068	0.177511	0.150009	0.045572	0.006451	0.019525	0.014983	0.002306	0.002359	0.006212	0.000585	0.002203

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,494.2185	4,494.2185	0.2208	0.0457	4,513.0158
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,723.1950	4,723.1950	0.2320	0.0480	4,742.9500
NaturalGas Mitigated	0.2188	1.8701	0.7958	0.0119		0.1512	0.1512		0.1512	0.1512	0.0000	2,165.7940	2,165.7940	0.0415	0.0397	2,178.9747
NaturalGas Unmitigated	0.2623	2.2413	0.9537	0.0143		0.1812	0.1812		0.1812	0.1812	0.0000	2,595.6245	2,595.6245	0.0498	0.0476	2,611.4210

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.86402e+007	0.2623	2.2413	0.9537	0.0143		0.1812	0.1812		0.1812	0.1812	0.0000	2,595.6245	2,595.6245	0.0498	0.0476	2,611.4210
Total		**0.2623**	**2.2413**	**0.9537**	**0.0143**		**0.1812**	**0.1812**		**0.1812**	**0.1812**	**0.0000**	**2,595.6245**	**2,595.6245**	**0.0498**	**0.0476**	**2,611.4210**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.05854e+007	0.2188	1.8701	0.7958	0.0119		0.1512	0.1512		0.1512	0.1512	0.0000	2,165.7940	2,165.7940	0.0415	0.0397	2,178.9747
Total		**0.2188**	**1.8701**	**0.7958**	**0.0119**		**0.1512**	**0.1512**		**0.1512**	**0.1512**	**0.0000**	**2,165.7940**	**2,165.7940**	**0.0415**	**0.0397**	**2,178.9747**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.76397e+007	4,723.1950	0.2320	0.0480	4,742.9500
Total		**4,723.1950**	**0.2320**	**0.0480**	**4,742.9500**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Apartments Mid Rise	1.67845e+007	4,494.2185	0.2208	0.0457	4,513.0158
Total		**4,494.2185**	**0.2208**	**0.0457**	**4,513.0158**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	22.3458	0.6105	51.5023	2.6500e-003		0.2735	0.2735		0.2735	0.2735	0.0000	82.1220	82.1220	0.0876	0.0000	83.9608
Unmitigated	23.7693	0.6105	51.5023	2.6500e-003		0.2735	0.2735		0.2735	0.2735	0.0000	82.1220	82.1220	0.0876	0.0000	83.9608

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.0504					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	19.0393					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6795	0.6105	51.5023	2.6500e-003		0.2735	0.2735		0.2735	0.2735	0.0000	82.1220	82.1220	0.0876	0.0000	83.9608
Total	**23.7693**	**0.6105**	**51.5023**	**2.6500e-003**		**0.2735**	**0.2735**		**0.2735**	**0.2735**	**0.0000**	**82.1220**	**82.1220**	**0.0876**	**0.0000**	**83.9608**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.0504					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	17.6158					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6795	0.6105	51.5023	2.6500e-003		0.2735	0.2735		0.2735	0.2735	0.0000	82.1220	82.1220	0.0876	0.0000	83.9608
Total	22.3458	0.6105	51.5023	2.6500e-003		0.2735	0.2735		0.2735	0.2735	0.0000	82.1220	82.1220	0.0876	0.0000	83.9608

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	616.5668	0.3365	0.2011	685.9748
Unmitigated	723.7937	0.4168	0.2506	810.2320

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
Apartments Mid Rise	317.626 / 200.242	723.7937	0.4168	0.2506	810.2320
Total		723.7937	0.4168	0.2506	810.2320

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	254.101 / 200.242	616.5868	0.3385	0.2011	685.9748
Total		616.5868	0.3385	0.2011	685.9748

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	455.2072	26.9020	0.0000	1,020.1488
Unmitigated	455.2072	26.9020	0.0000	1,020.1488

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	2242.5	455.2072	26.9020	0.0000	1,020.1488
Total		455.2072	26.9020	0.0000	1,020.1488

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	2242.5	455.2072	26.9020	0.0000	1,020.1488
Total		455.2072	26.9020	0.0000	1,020.1488

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

APPENDIX C

Traffic Impact Study

Revised Draft Transportation Impact Analysis Housing Element Update

December 2013

Prepared for:
City of Elk Grove

Submitted by:

FEHR & PEERS

2990 Lava Ridge Court,
Suite 200
Roseville, CA 95661

Table of Contents

Appendices

Appendix A: Trip Generation Comparison

List of Figures

List of Tables

1. INTRODUCTION

This study addresses the potential transportation impacts associated with implementation of the 2013 Housing Element Update. The project includes revisions to the adopted Housing Element that are necessary to comply with changes to State law and that are needed to reflect changes that have occurred since adoption of the current Housing Element in 2008. Relative to transportation, the project includes amendments to land use designation and zoning designation changes to 42 sites throughout the City to accommodate housing growth and the City's fair-share of the 2013-2021 Regional Housing Needs Assessment (RHNA). These changes could have an effect on transportation. This impact analysis examines the transportation system serving the project under cumulative conditions for the following scenarios:

- General Plan Conditions – Reflects the current General Plan
- General Plan Plus Project Conditions – Reflects the current General Plan with the proposed changes to the Housing Element.

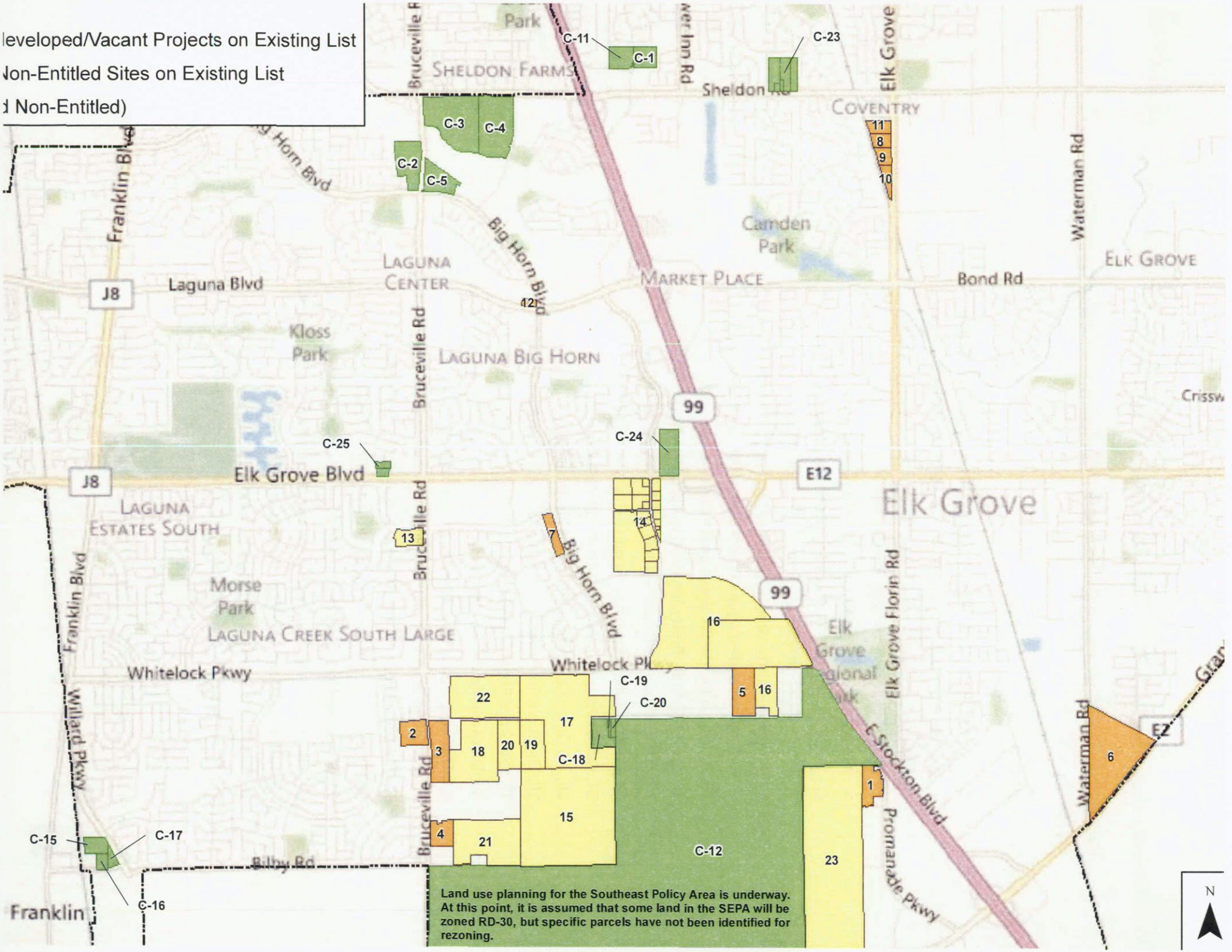
STUDY AREA

The study area was selected based on the expected travel characteristics of the project (i.e., project location), as well as the nearby transportation facilities' susceptibility to project impacts. The study area is shown on Figure 1. The study segments listed below provide direct access to candidate rezone sites.

leveloped/Vacant Projects on Existing List

Non-Entitled Sites on Existing List

Non-Entitled)



The following 47 roadway segments, including six segments on SR 99 and four segments on I-5 were selected for analysis:

STUDY ROADWAYS

1. Big Horn Boulevard – Franklin Boulevard to Laguna Boulevard
2. Big Horn Boulevard – Laguna Boulevard to Elk Grove Boulevard
3. Big Horn Boulevard – Elk Grove Boulevard to Kammerer Road
4. Bradshaw Road – Vintage Park Road to Calvine Road
5. Bradshaw Road – Calvine Road to Bond Road
6. Bradshaw Road – Bond Road to Grant Line Road
7. Bruceville Road – Jacinto Road to Sheldon Road
8. Bruceville Road – Sheldon Road to Laguna Boulevard
9. Bruceville Road – Laguna Boulevard to Elk Grove Boulevard
10. Bruceville Road – Elk Grove Boulevard to Bilby Road
11. Calvine Road – Power Inn Road to Elk Grove-Florin Road
12. Calvine Road – Elk Grove-Florin Road to Bradshaw Road
13. Calvine Road – Bradshaw Road to Grant Line Road
14. Center Parkway – Sheldon Road to Jacinto Road
15. Elk Grove Boulevard – I-5 to Franklin Boulevard
16. Elk Grove Boulevard – Franklin Boulevard to Bruceville Road
17. Elk Grove Boulevard – Bruceville Road to Big Horn Boulevard
18. Elk Grove Boulevard – Big Horn Boulevard to East Stockton Boulevard
19. Elk Grove Boulevard – East Stockton Boulevard to Elk Grove-Florin Road
20. Elk Grove Boulevard – Elk Grove-Florin Road to Waterman Road
21. Elk-Grove Florin Road – Vintage Park Road to Calvine Road
22. Elk Grove-Florin Road – Calvine Road to Bond Road
23. Elk Grove-Florin Road – Bond Road to Elk Grove Boulevard
24. Elk Grove-Florin Road – Elk Grove Boulevard to East Stockton Boulevard
25. Grant Line Road – SR99 to East Stockton Boulevard
26. Grant Line Road – East Stockton Boulevard to Bradshaw Road
27. Kammerer – Big Horn Boulevard to Promenade Parkway
28. Laguna Boulevard – I-5 to Franklin Boulevard
29. Laguna Boulevard – Franklin Boulevard to Bruceville Road
30. Laguna Boulevard – Bruceville Road to Big Horn Boulevard

31. Laguna Boulevard – Big Horn Boulevard to East Stockton Boulevard
32. Sheldon Road – Center Parkway to East Stockton Boulevard
33. Sheldon Road – East Stockton Boulevard to Elk Grove-Florin Road
34. Sheldon Road – Elk Grove-Florin Road to Bradshaw Road
35. State Route 99 – Eschinger Road to Grant Line Road
36. State Route 99 – Grant Line Road to Elk Grove Boulevard
37. State Route 99 – Elk Grove Boulevard to Laguna Boulevard
38. State Route 99 – Laguna Boulevard to Sheldon Road
39. State Route 99 – Sheldon Road to Calvine Road
40. State Route 99 – Calvine Road to Stockton Boulevard
41. Waterman – Calvine Road to Vintage Park Road
42. Waterman – Calvine Road to Bond Road
43. Waterman – Bond Road to Grant Line Road
44. Interstate 5 – Twin Cities Road to Hood Franklin Road
45. Interstate 5 – Hood Franklin Road to Elk Grove Boulevard
46. Interstate 5 – Elk Grove Boulevard to Laguna Boulevard
47. Interstate 5 – Laguna Boulevard to Pocket Road

DATA COLLECTION

To provide a baseline for the transportation analysis, traffic counts collected in late 2012 and early 2013 are used in this analysis. The directional AM and PM peak hour roadway segment traffic counts are based on intersection turning movement traffic counts. Peak hour traffic counts for Interstate 5 (I-5) and State Route 99 (SR 99) are from Caltrans Performance Measurement System (PeMS) and Transportation Systems Network (TSN) database and are also representative of 2012/2013 conditions..

ANALYSIS METHODOLOGY

Analysis methods for roadways are described below.

ROADWAY SEGMENTS

Level of service is a qualitative measure of traffic operating conditions whereby a letter grade, from A to F, is assigned. These grades represent the perspective of drivers and are an indication of the

comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions.

Roadway segments were analyzed by comparing average peak hour daily traffic volumes to capacity thresholds presented in the City of Elk Grove's Traffic Impact Analysis Guidelines (July 2000). Consistent with assumptions in the City's General Plan background report, study segments on Elk Grove Boulevard and Grant Line Road were analyzed using thresholds for an arterial roadway with moderate access control.

Consistent with the General Plan transportation analysis, the analysis presented in this report is based on AM and PM peak hour directional traffic volumes to address traffic flow directionality that occurs on some study facilities associated with morning and evening work commute patterns to/from the City of Sacramento. For study roadways, traffic flows are generally higher to freeways and regional connectors in the morning and away from freeways and regional connectors in the evening. All city roadways were analyzed using a capacity of 990 vehicles per hour per lane and all freeways were analyzed using a capacity of 2,200 vehicles per hour per lane. Table 1 shows level of service (LOS) volume-to-capacity thresholds for study roadways.

TABLE 1: LEVEL OF SERVICE AND VOLUME-TO-CAPACITY THRESHOLDS FOR STUDY ROADWAYS

A	B	C	D	E	F
≤ 0.6	0.61 to 0.70	0.71 to 0.80	0.81 to 0.90	0.91 to 1.00	> 1.00

Notes: [1] Thresholds apply to arterial roadways with moderate access control.
Source: City of Elk Grove's *Traffic Impact Analysis Guidelines*, July 2000.

As outlined below, SR 99 from just south of Elk Grove Boulevard through the city includes one high occupancy vehicle (HOV) land and two general purpose lanes in each direction. Therefore, to account for HOV lane utilization, the freeway segment analysis is based on the traffic volume in the general purpose lanes, by removing vehicles using the HOV lanes from the analysis, based on measured HOV volumes documented in Caltrans' *District 3 High Occupancy Vehicle Lanes Status Report, Sacramento Metropolitan Area* (July 2011). For segments of SR 99 that include HOV lanes, the

roadway operations analysis tables report total freeway volume (i.e., volume in HOV and general purpose lanes) and the volume in the general purpose lanes.

ANALYSIS EVALUATION CRITERIA

Consistent with the City of Elk Grove's *Traffic Impact Analysis Guidelines* (July 2000), the following evaluation criteria were used to determine the significance of project impacts:

ROADWAY SEGMENTS

An impact to a roadway segment is considered significant, and mitigation measures must be identified when:

- The traffic generated by the project degrades the LOS from an acceptable LOS D or better (without the project) to an unacceptable LOS E or LOS F (with the project);
- The level of service (without project) is unacceptable and project generated traffic increases the volume-to-capacity (V/C) ratio by 0.05 or more.

FREEWAY FACILITIES

An impact is considered significant on freeway facilities if the Project causes the facility to change from acceptable to unacceptable LOS.

For facilities, which are or will be (in the cumulative condition), operating at unacceptable LOS without the Project, an impact is considered significant if the project:

- Increases the V/C ratio on a freeway mainline segment or freeway ramp junction by 0.05.
- Increase the number of peak hour vehicles on a freeway mainline segment or freeway ramp junction ramp junction by more than five percent.

According to the Guide for the Preparation of Traffic Impact Studies (Caltrans, June 2001), Caltrans strives to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities; therefore, LOS D was selected as the minimum standard for all study freeway facilities. Unlike the City of Elk Grove traffic impact study guidelines, Caltrans does not provide a threshold for determining if the addition of project traffic to a freeway facility that operates unacceptably without

the project is considered significant. Therefore, under these circumstances, the addition of any project traffic is considered significant.

BICYCLE/PEDESTRIAN/TRANSIT FACILITIES

An impact is considered significant if implementation of the project will disrupt or interfere with existing or planned bicycle, pedestrian, or transit facilities.

REPORT ORGANIZATION

The remainder of this report consists of the following chapters:

- Chapter 2 – Existing Conditions
- Chapter 3 – Cumulative Conditions (2035 General Plan)
- Chapter 4 – Impacts and Mitigation

2. EXISTING CONDITIONS

This chapter describes the physical and operational characteristics of the transportation system within the study area.

EXISTING TRANSPORTATION SYSTEM

The City of Elk Grove is generally located south Sacramento County about 15 miles south of the City of Sacramento. Regional freeway access to Elk Grove is provided by Interstate 5 (I-5) and State Route 99 (SR 99). Grant Line Road provides access to regional destination north and south of Elk Grove like the City of Rancho Cordova, City of Folsom, and community of El Dorado Hills. Elk Grove is generally served by a network of arterial-level roadways on a one-mile grid with interchanges on SR 99. I-5 has two interchanges that provide direct access to the city.

ROADWAY SYSTEM

- **Big Horn Boulevard** is a four-lane arterial street extending from Franklin Boulevard to Whitelock Parkway. Big Horn Boulevard is constructed to its general plan designation.
- **Bradshaw Road** is a two-lane north-south roadway extending from Folsom Boulevard in Sacramento County to Grant Line Road. Grant line is designated as a six-lane arterial in the general plan.
- **Bruceville Road** is a north-south road extending from Valley Hi Drive near the Kaiser–Permanente complex in unincorporated Sacramento County south through Elk Grove into San Joaquin County. Bruceville Road is four lanes between Sheldon Road and Laguna Boulevard, six lanes between Laguna Boulevard and Elk Grove Boulevard, four lanes between Elk Grove Boulevard and Whitelock Parkway, and two lanes south of Whitelock Parkway. Bruceville Road is designated as a six-lane arterial in the general plan. Bruceville Road between Calvine Road and Bond Road is subject to the Elk Grove Rural Road Improvement Policy.
- **Calvine Road** is an east-west road extending from SR 99 to Grant Line Road and is the northern edge of Elk Grove. Calvine Road is six lanes from Power-Inn Road to Cliffcrest Drive, transitions to four lanes from Cliffcrest Drive to Vintage Park Drive, and five lanes between Vintage Park Drive and Elk-Grove Florin Road. East of Elk-Grove-Florin Road, Calvine

alternates between four, five, and six lanes to Vineyard Road, where it continues as a two-lane road to Grant Line Road. Calvine Road is designated as a six-lane arterial in the general plan.

- **Center Parkway** is a roughly north-south road extending west of Bruceville Road to the city limits. Center Parkway is four lanes Hampton Cove Way to Sheldon Road. It is evaluated as a two-lane road in this study. Center Parkway is designated as a six-lane arterial in the general plan.
- **Elk Grove Boulevard** is an east-west road extending from I-5 to Grant Line Road. Elk Grove Boulevard is six lanes from I-5 to East Stockton Boulevard, four lanes to Elk Grove-Florin Road, and two lanes to Grant Line Road. Elk Grove Boulevard is constructed to its general plan designation between I-5 and Waterman Road. Elk Grove Boulevard is designated in the general plan as a four-lane arterial east of Waterman Road.
- **Elk Grove-Florin Road** is a north-south arterial extending from Florin Road in Sacramento County to East Stockton Boulevard (near SR 99) in south Elk Grove. Elk Grove-Florin Road has four through lanes from Brittany Park Road to Elk Grove Boulevard and two lanes from Elk Grove Boulevard to East Stockton Boulevard. Elk Grove-Florin Road is designated as a six-lane arterial in the general plan from Brittany Park Road to Bond Road, as a four lane arterial between Bond Road and Elk Grove Boulevard, and as a two-lane collector south of Elk Grove Boulevard.
- **Grant Line Road** is traverses Elk Grove in a southwest to northeast direction. Grant Line Road extends from SR 99 through Elk Grove to White Rock Road in Rancho Cordova. Grant Line Road is six lanes between SR 99 and East Stockton Boulevard. East of East Stockton Boulevard, Grant Line Road is two lanes. Grant line Road is designated as an eight lane arterial between SR 99 and Bradshaw Road and as a six lane arterial east of Bradshaw Road. Grant Line Road between Calvine Road and just east of Equestrian Drive is subject to the Elk Grove Rural Road Improvement Policy. Grant Line Road is also part of the Capital SouthEast Connector project.
- **Kammerer Road** is an east-west road extending from Bruceville Road to West Stockton Boulevard. Kammerer Road is two lanes from just west of Lent Ranch Parkway to Bruceville Road. Kammerer Road is part of the Capital SouthEast Connector project and is designated

in the General Plan as an eight lane arterial from SR 99 to Lent Ranch Parkway and as a six-lane arterial from Lent Ranch Parkway to Franklin Boulevard. The general plan includes the extension of Kammerer Road from Bruceville Road to Franklin Boulevard.

- **Laguna Boulevard** is an east-west roadway extending from I-5 to SR 99. Laguna Boulevard is six lanes from I-5 to Big Horn Boulevard and eight lanes between Big Horn Boulevard and Laguna Springs Drive. Laguna Boulevard is constructed to its general plan designation.
- **Sheldon Road** *is an east-west roadway* that extends from Bruceville Road to Grant Line Road. Sheldon Road is four lanes from Bruceville Road to Lewis Stein Road, six lanes from Lewis Stein Road and Power Inn Road, four lanes between Power Inn Road and Elk Grove-Florin Road, and two lanes east of Elk Grove-Florin Road. Sheldon Road is improved to its general plan designation between Bruceville Road Elk Grove-Florin Road. Sheldon Road is designated as a four-lane arterial between Elk Grove-Florin Road and Bradshaw Road and as a two-lane roadway with expanded right-of-way between Bruceville Road and Grant Line Road. Sheldon Road between Elk Grove-Florin Road and Grant Line Road is subject to the Elk Grove Rural Road Improvement Policy.
- **Waterman Road** is a north-south roadway that extends from Calvine Road to Grant Line Road in the city. Waterman Road is generally two lanes with widening at improved intersection to accommodate it general plan designation as a four-lane arterial. The segment of Waterman Road ½ mile north and south of Sheldon Road is subject to the Elk Grove Rural Road Improvement Policy.
- **State Route 99 (SR 99)** is a north-south freeway that provides a connection between all of the major cities in the Central Valley, from Sacramento and Stockton in the north to the cities of Modesto, Merced, Fresno, and Bakersfield in the south. Access to SR 99 is provided through interchanges at Grant Line Road, Elk Grove Boulevard, Laguna Boulevard/Bond Road, and Sheldon Road. This section of SR 99 has two mainline travel lanes and one high occupancy vehicle (HOV) lane in either direction with a posted speed limit of 65 mph.
- **Interstate 5 (I-5)** is a north-south freeway that traverses California and is a major national freeway that connects between Mexico and Canada. Near the Hood Franklin Road interchange, I-5 is a four-lane freeway and transitions to a six-lane freeway north of Laguna Boulevard.

BICYCLE AND PEDESTRIAN FACILITIES

Bicycle and pedestrian trips account for approximately 2.8 percent of all work trips and 4.9 percent of all non-work trips made by residents and employees in suburban areas. This estimate is from the *Pre-Census Travel Behavior Report Analysis of the 2000 SACOG Household Travel Survey* (Sacramento Area Council of Governments, 2001).

The majority of the bike paths in the city limits are Class II lanes, which are located on existing streets or highways and are striped for one-way bicycle travel. Below are descriptions of bicycle paths and their classifications.

Class I Bike Paths provide a completely separated right-of-way for the exclusive use of bicycles and pedestrian with cross-flow minimized.

Class II Bike Lanes are striped lanes for one-way bike travel on a street or highway.

Class III Bike Routes provide for shared use with pedestrians or motor vehicle traffic.

The City adopted the City of Elk Grove Bicycle and Pedestrian Master Plan (BPMP) in July 2004. The BPMP identifies existing facilities opportunities, constraints and destination points for bicycle users and pedestrians in the City of Elk Grove. Existing and proposed bicycle and pedestrian facilities in the documented in the BPMP are show in the following graphic (Figure 2 of the BPMP).

TRANSIT FACILITIES

The City of Elk Grove is served by its own transit system, e-Tran. e-Tran neighborhood shuttle service (ez-tran), limited local transit service, and commuter routes. Local transit service is provided on weekdays (six routes) and weekends (three routes). e-Tran provides nine commuter routes that operate mid-week, including two reverse commuter routes. The current e-Trans system maps is shown below.

TRAFFIC OPERATIONS ANALYSIS

This section describes the operations of the study intersections, and roadway segments under existing conditions.

ROADWAY SEGMENT OPERATIONS

Table 2 summarizes AM and PM peak hour directional traffic volumes, volume-to-capacity (V/C) ratio, and LOS for the study roadway segments. As shown, the following roadway segments operate unacceptably at LOS E or F:

<u>City of Elk Grove Roadways</u>

- Bruceville Road (Southbound) – Elk Grove Boulevard to Bilby Road (LOS F during the PM peak hour)
- Calvine Road (Eastbound) – Power Inn Road to Elk Grove-Florin Road (LOS F during the PM peak hour along two-lane segment)

- Calvine Road (Westbound) – Power Inn Road to Elk Grove-Florin Road (LOS F during the AM peak hour along two-lane segment)
- Elk Grove Florin Road (Southbound) – Vintage Park Road to Calvine Road (LOS E during the PM peak hour)

SR 99 and I-5

The roadway segment operations documented in Table 2 does not capture localized congestion due to operational effects of closely spaced intersections (long vehicle queues, low vehicle speed, and long delay), experienced near freeway interchanges. Similarly, peak period operations on SR 99 and I-5 may be worse than reported due to reoccurring bottlenecks. As documented in the *California Department of Transportation Mobility Performance Report, 2009,* several bottleneck locations exist on SR 99 that meter traffic northbound in the morning and southbound in the evening, which cause congested conditions (i.e., vehicle speed of 35 miles per hour or less) and vehicle queuing on northbound SR 99 during the AM peak period. Similarly, bottlenecks on southbound SR 99 in the evening meter traffic on SR 99 through Elk Grove.

TABLE 2: PEAK HOUR ROADWAY SEGEMENT OPERATIONS – EXISTING CONDITIONS

ID	Direction	Roadway	From	To	# of Lanes	Hourly Capacity (Per Lane)	Existing Conditions					
							AM			PM		
							Volume	Volume to Capacity	LOS	Volume	Volume to Capacity	LOS
1	EB	Big Horn Boulevard	Franklin Boulevard	Laguna Boulevard	2	990	601	0.30	A	540	0.27	A
1	WB	Big Horn Boulevard	Franklin Boulevard	Laguna Boulevard	2	990	673	0.34	A	602	0.30	A
2	NB	Big Horn Boulevard	Laguna Boulevard	Elk Grove Boulevard	2	990	591	0.30	A	424	0.21	A
2	SB	Big Horn Boulevard	Laguna Boulevard	Elk Grove Boulevard	2	990	504	0.25	A	577	0.29	A
3	NB	Big Horn Boulevard	Elk Grove Boulevard	Kammerer Road	2	990	704	0.36	A	358	0.18	A
3	SB	Big Horn Boulevard	Elk Grove Boulevard	Kammerer Road	2	990	546	0.28	A	466	0.24	A
4	NB	Bradshaw Road	Vintage Park Road	Calvine Road	1	990	608	0.61	B	474	0.48	A
4	SB	Bradshaw Road	Vintage Park Road	Calvine Road	1	990	639	0.65	B	745	0.75	C
5	NB	Bradshaw Road	Calvine Road	Bond Road	1	990	561	0.57	A	303	0.31	A

TABLE 2: PEAK HOUR ROADWAY SEGEMENT OPERATIONS – EXISTING CONDITIONS

							Existing Conditions					
							AM			PM		
ID	Direction	Roadway	From	To	# of Lanes	Hourly Capacity (Per Lane)	Volume	Volume to Capacity	LOS	Volume	Volume to Capacity	LOS
5	SB	Bradshaw Road	Calvine Road	Bond Road	1	990	349	0.35	A	541	0.55	A
6	NB	Bradshaw Road	Bond Road	Grant Line Road	1	990	436	0.44	A	285	0.29	A
6	SB	Bradshaw Road	Bond Road	Grant Line Road	1	990	512	0.52	A	520	0.53	A
7	NB	Bruceville Road	Jacinto Road	Sheldon Road	2	990	884	0.45	A	729	0.37	A
7	SB	Bruceville Road	Jacinto Road	Sheldon Road	2	990	424	0.21	A	876	0.44	A
8	NB	Bruceville Road	Sheldon Road	Laguna Boulevard	2	990	1,612	0.81	D	1,211	0.61	B
8	SB	Bruceville Road	Sheldon Road	Laguna Boulevard	2	990	851	0.43	A	1,750	0.88	D
9	NB	Bruceville Road	Laguna Boulevard	Elk Grove Boulevard	3	990	909	0.31	A	863	0.32	A
9	SB	Bruceville Road	Laguna Boulevard	Elk Grove Boulevard	3	990	608	0.20	A	1,203	0.41	B
10	NB	Bruceville Road	Elk Grove Boulevard	Bilby Road	1	990	883	0.89	D	649	0.66	B

TABLE 2: PEAK HOUR ROADWAY SEGEMENT OPERATIONS – EXISTING CONDITIONS

ID	Direction	Roadway	From	To	# of Lanes	Hourly Capacity (Per Lane)	Existing Conditions					
							AM			PM		
							Volume	Volume to Capacity	LOS	Volume	Volume to Capacity	LOS
10	SB	Bruceville Road	Elk Grove Boulevard	Bilby Road	1	990	668	0.67	B	1,292	1.31	**F**
11	EB	Calvine Road	Power Inn Road	Elk Grove-Florin Road	2	990	1,430	0.72	C	2,010	1.02	**F**
11	WB	Calvine Road	Power Inn Road	Elk Grove-Florin Road	2	990	2,330	1.18	**F**	1,760	0.89	D
12	EB	Calvine Road	Elk Grove-Florin Road	Bradshaw Road	2	990	620	0.31	A	600	0.30	A
12	WB	Calvine Road	Elk Grove-Florin Road	Bradshaw Road	2	990	830	0.42	A	840	0.42	A
13	EB	Calvine Road	Bradshaw Road	Grant Line Road	1	990	630	0.64	B	780	0.79	C
13	WB	Calvine Road	Bradshaw Road	Grant Line Road	1	990	630	0.64	B	480	0.48	A
14	NB	Center Parkway	Sheldon Road	Jacinto Road	2	990	698	0.35	A	537	0.27	A
14	SB	Center Parkway	Sheldon Road	Jacinto Road	2	990	851	0.43	A	674	0.34	A
15	EB	Elk Grove Boulevard	Interstate 5	Franklin Boulevard	3	990	1,761	0.59	A	2,044	0.69	B

TABLE 2: PEAK HOUR ROADWAY SEGEMENT OPERATIONS – EXISTING CONDITIONS

ID	Direction	Roadway	From	To	# of Lanes	Hourly Capacity (Per Lane)	Existing Conditions					
							AM			PM		
							Volume	Volume to Capacity	LOS	Volume	Volume to Capacity	LOS
15	WB	Elk Grove Boulevard	Interstate 5	Franklin Boulevard	3	990	1,938	0.65	B	1,338	0.45	A
16	EB	Elk Grove Boulevard	Franklin Boulevard	Bruceville Road	2	990	1,644	0.83	D	1,405	0.71	C
16	WB	Elk Grove Boulevard	Franklin Boulevard	Bruceville Road	3	990	909	0.31	A	1,421	0.48	A
17	EB	Elk Grove Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,670	0.56	A	1,357	0.46	A
17	WB	Elk Grove Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,041	0.35	A	1,756	0.59	A
18	EB	Elk Grove Boulevard	Big Horn Boulevard	East Stockton Boulevard	3	990	1,813	0.61	B	1,590	0.54	A
18	WB	Elk Grove Boulevard	Big Horn Boulevard	East Stockton Boulevard	3	990	1,308	0.44	A	1,989	0.67	B
19	EB	Elk Grove Boulevard	East Stockton Boulevard	Elk Grove-Florin Rd	2	990	1,243	0.63	B	1,314	0.66	B
19	WB	Elk Grove Boulevard	East Stockton Boulevard	Elk Grove-Florin Rd	2	990	1,086	0.55	A	1,300	0.66	B
20	EB	Elk Grove Boulevard	Elk Grove-Florin Rd	Waterman Road	1	990	434	0.44	A	639	0.65	B

TABLE 2: PEAK HOUR ROADWAY SEGEMENT OPERATIONS – EXISTING CONDITIONS

ID	Direction	Roadway	From	To	# of Lanes	Hourly Capacity (Per Lane)	Existing Conditions					
							AM			PM		
							Volume	Volume to Capacity	LOS	Volume	Volume to Capacity	LOS
20	WB	Elk Grove Boulevard	Elk Grove-Florin Rd	Waterman Road	1	990	652	0.66	B	578	0.58	A
21	NB	ElkGrove-Florin Road	Vintage Park Road	Calvine Road	3	990	1,871	0.63	B	1,234	0.42	A
21	SB	Elk Grove-Florin Road	Vintage Park Road	Calvine Road	2	990	1,319	0.67	B	1,965	0.99	E
22	NB	Elk Grove-Florin Road	Calvine Road	Bond Road	2	990	1,247	0.63	B	914	0.46	A
22	SB	Elk Grove-Florin Road	Calvine Road	Bond Road	2	990	1,069	0.54	A	1,349	0.68	B
23	NB	Elk Grove-Florin Road	Bond Road	Elk Grove Boulevard	2	990	952	0.48	A	841	0.42	A
23	SB	Elk Grove-Florin Road	Bond Road	Elk Grove Boulevard	2	990	927	0.47	A	963	0.49	A
24	NB	Elk Grove-Florin Road	Elk Grove Boulevard	East Stockton Boulevard	1	990	471	0.48	A	375	0.38	A
24	SB	Elk Grove-Florin Road	Elk Grove Boulevard	East Stockton Boulevard	1	990	228	0.23	A	384	0.39	A
25	EB	Grant Line Road	State Route 99	East Stockton Boulevard	3	990	731	0.25	A	790	0.27	A

TABLE 2: PEAK HOUR ROADWAY SEGEMENT OPERATIONS – EXISTING CONDITIONS

							Existing Conditions					
							AM			PM		
ID	Direction	Roadway	From	To	# of Lanes	Hourly Capacity (Per Lane)	Volume	Volume to Capacity	LOS	Volume	Volume to Capacity	LOS
25	WB	Grant Line Road	State Route 99	East Stockton Boulevard	3	990	721	0.24	A	831	0.28	A
26	EB	Grant Line Road	East Stockton Boulevard	Bradshaw Road	1	990	568	0.57	A	588	0.59	A
26	WB	Grant Line Road	East Stockton Boulevard	Bradshaw Road	1	990	553	0.56	A	645	0.65	B
27	EB	Kammerer Road	Big Horn Boulevard	Promenade Parkway	1	990	360	0.36	A	201	0.20	A
27	WB	Kammerer Road	Big Horn Boulevard	Promenade Parkway	1	990	200	0.20	A	380	0.38	A
28	EB	Laguna Boulevard	Interstate 5	Franklin Boulevard	3	990	1,178	0.40	A	2,271	0.76	C
28	WB	Laguna Boulevard	Interstate 5	Franklin Boulevard	3	990	1,456	0.49	A	1,341	0.45	A
29	EB	Laguna Boulevard	Franklin Boulevard	Bruceville Road	3	990	902	0.30	A	1,775	0.60	A
29	WB	Laguna Boulevard	Franklin Boulevard	Bruceville Road	3	990	957	0.32	A	1,154	0.39	A
30	EB	Laguna Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,078	0.36	A	1,947	0.66	B

TABLE 2: PEAK HOUR ROADWAY SEGEMENT OPERATIONS – EXISTING CONDITIONS

ID	Direction	Roadway	From	To	# of Lanes	Hourly Capacity (Per Lane)	Existing Conditions					
							AM			PM		
							Volume	Volume to Capacity	LOS	Volume	Volume to Capacity	LOS
30	WB	Laguna Boulevard	Bruceville Road	Big Horn Boulevard	3	990	1,353	0.46	A	1,475	0.50	A
31	EB	Laguna Boulevard	Big Horn Boulevard	East Stockton Boulevard	4	990	1,376	0.35	A	2,677	0.68	B
31	WB	Laguna Boulevard	Big Horn Boulevard	East Stockton Boulevard	3	990	2,049	0.69	B	2,103	0.71	C
32	EB	Sheldon Road	Center Parkway	East Stockton Boulevard	2	990	1,356	0.68	B	1,139	0.58	A
32	WB	Sheldon Road	Center Parkway	East Stockton Boulevard	2	990	985	0.50	A	1,586	0.80	D
33	EB	Sheldon Road	East Stockton Boulevard	Elk Grove-Florin Road	2	990	758	0.38	A	1,083	0.55	A
33	WB	Sheldon Road	East Stockton Boulevard	Elk Grove-Florin Road	2	990	1,298	0.66	B	1,055	0.53	A
34	EB	Sheldon Road	Elk Grove-Florin Road	Bradshaw Road	1	990	484	0.49	A	462	0.47	A
34	WB	Sheldon Road	Elk Grove-Florin Road	Bradshaw Road	1	990	369	0.37	A	521	0.53	A
35	NB	State Route 99	Eschinger Road	Grant Line Road	2	2200	2,500	0.57	A	2,470	0.56	A

TABLE 2: PEAK HOUR ROADWAY SEGEMENT OPERATIONS – EXISTING CONDITIONS

ID	Direction	Roadway	From	To	# of Lanes	Hourly Capacity (Per Lane)	Existing Conditions					
							AM			PM		
							Volume	Volume to Capacity	LOS	Volume	Volume to Capacity	LOS
35	SB	State Route 99	Eschinger Road	Grant Line Road	2	2200	2,160	0.49	A	2,700	0.61	B
36	NB	State Route 99	Grant Line Road	Elk Grove Boulevard	2	2200	2,110	0.48	A	2,160	0.49	A
36	SB	State Route 99	Grant Line Road	Elk Grove Boulevard	2	2200	1,890	0.43	A	2,290	0.52	A
37	NB	State Route 99[1]	Elk Grove Boulevard	Laguna Boulevard	2+HOV GP	2200	3,220 2,160	0.49	A	3,140 2,100	0.48	A
37	SB	State Route 99[1]	Elk Grove Boulevard	Laguna Boulevard	2+HOV GP	2200	2,890 1,940	0.44	A	3,640 2,440	0.55	A
38	NB	State Route 99[1]	Laguna Boulevard	Sheldon Road	2+HOV GP	2200	4,064 2720	0.62	B	4,033 2700	0.61	B
38	SB	State Route 99[1]	Laguna Boulevard	Sheldon Road	2+HOV GP	2200	3,602 2410	0.55	B	4,479 3000	0.68	B
39	NB	State Route 99[1]	Sheldon Road	Calvine Road	2+HOV GP	2200	4,394 2940	0.67	B	4,360 2920	0.66	B

TABLE 2: PEAK HOUR ROADWAY SEGEMENT OPERATIONS – EXISTING CONDITIONS

ID	Direction	Roadway	From	To	# of Lanes	Hourly Capacity (Per Lane)	Existing Conditions					
							AM			PM		
							Volume	Volume to Capacity	LOS	Volume	Volume to Capacity	LOS
39	SB	State Route 99[1]	Sheldon Road	Calvine Road	2+HOV GP	2200	3,895 2610	0.59	B	4,843 3240	0.74	C
40	NB	State Route 99[1]	Calvine Road	Stockton Boulevard	2+HOV GP	2200	5,055 3390	0.77	B	5,016 3360	0.76	C
40	SB	State Route 99[1]	Calvine Road	Stockton Boulevard	2+HOV GP	2200	4,480 3000	0.68	B	5,571 3730	0.85	D
41	NB	Waterman Road	Calvine Road	Vintage Park Road	1	990	379	0.38	A	395	0.40	A
41	SB	Waterman Road	Calvine Road	Vintage Park Road	1	990	544	0.55	A	436	0.44	A
42	NB	Waterman Road	Calvine Road	Bond Road	1	990	426	0.43	A	305	0.31	A
42	SB	Waterman Road	Calvine Road	Bond Road	1	990	423	0.43	A	502	0.51	A
43	NB	Waterman Road	Bond Road	Grant Line Road	1	990	570	0.58	A	499	0.50	A
43	SB	Waterman Road	Bond Road	Grant Line Road	1	990	463	0.47	A	610	0.62	B

TABLE 2: PEAK HOUR ROADWAY SEGEMENT OPERATIONS – EXISTING CONDITIONS

ID	Direction	Roadway	From	To	# of Lanes	Hourly Capacity (Per Lane)	Existing Conditions					
							AM			PM		
							Volume	Volume to Capacity	LOS	Volume	Volume to Capacity	LOS
44	NB	Interstate 5	Twin Cities Road	Hood-Franklin Road	2	2200	1,610	0.37	A	1,940	0.44	A
44	SB	Interstate 5	Hood-Franklin Road	Twin Cities Road	2	2200	1,490	0.34	A	1,910	0.43	A
45	NB	Interstate 5	Hood-Franklin Road	Elk Grove Boulevard	2	2200	2,140	0.49	A	1,950	0.44	A
45	SB	Interstate 5	Elk Grove Boulevard	Hood-Franklin Boulevard	2	2200	1,530	0.35	A	2,160	0.49	A
46	NB	Interstate 5	Elk Grove Boulevard	Laguna Boulevard	2	2200	2,719	0.62	B	2,475	0.56	A
46	SB	Interstate 5	Laguna Boulevard	Elk Grove Boulevard	2	2200	1,940	0.44	A	2,739	0.62	B
47	NB	Interstate 5	Laguna Boulevard	Pocket Road	3	2200	3,749	0.57	A	3,413	0.52	A
47	SB	Interstate 5	Pocket Road	Laguna Boulevard	3	2200	3,675	0.56	A	3,777	0.57	A

Notes:
[1] SR 99 operations based on general purpose (GP) volumes after accounting for traffic volume in HOV lane.
Fehr & Peers, 2013

3. CUMULATIVE CONDITIONS

This chapter discusses the conditions of the transportation system under cumulative conditions with the current General Plan and the proposed project.

PROPOSED PROJECT

The project includes revisions to the adopted Housing Element that are necessary to comply with changes to State law and that are needed to reflect changes that have occurred since adoption of the current Housing Element in 2008. Relative to transportation, the project includes amendments to the land use and zoning designation of up to 42 sites throughout the City to accommodate housing growth and the City's fair-share of the 2013-2021 Regional Housing Needs Assessment (RHNA). Table 3 summarizes the proposed changes to the project sites by comparing the current general plan designation and zoning to the proposed project. The project will increase the density of sites currently zoned for residential use, except for twelve sites, where the project will change non-residential designations (i.e., commercial and industrial) to high density residential. Figure 1 shows the location of the 42 project sites that are described in Table 3.

TABLE 3: EXISTING AND CANDIDATE RHNA SITES ANALYSIS MATRIX

Map ID	Acres	Location	Current Designations		Potential Designations		Realistic Unit Capacity at Proposed Designation
			General Plan	Zoning	General Plan	Zoning	
1	15.3	North end of Lent Ranch	HDR	SPA	HDR	SPA	245
2	12.4	East Franklin at SW corner of Quail Run Lane/Poppy Ridge Road and Bruceville Road	HDR	RD-20	HDR	RD-25	260

TABLE 3: EXISTING AND CANDIDATE RHNA SITES ANALYSIS MATRIX

Map ID	Acres	Location	Current Designations		Potential Designations		Realistic Unit Capacity at Proposed Designation
			General Plan	Zoning	General Plan	Zoning	
3	14	Laguna Ridge, SE corner of Poppy Ridge Road and Bruceville Road	HDR	RD-20	HDR	RD-25	294
4	9.58	Laguna Ridge, Bruceville Road just north of Bilby Road, just north of Seasons	HDR	RD-15	HDR	RD-25	201
5	11.5	Laguna Ridge, between Whitelock Parkway and Poppy Ridge, next to future community park site	HDR	RD-20	HDR	RD-25	242
6	15	Waterman and Grant Line Road	HDR	RD-20	HDR	RD-25	315
7A	8.7[i]	East Stockton just south of Sheldon	C/O/MF	SC(MF)	HDR	RD-25	191
C-1	8.68	East Stockton Blvd just north of Sheldon Road	MDR	SPAC99	HDR	RD-25	182
C-2	6.50[ii]	NW corner of Big Horn and Bruceville Road	RR	SPALCF	HDR	RD-25	137

TABLE 3: EXISTING AND CANDIDATE RHNA SITES ANALYSIS MATRIX

Map ID	Acres	Location	Current Designations		Potential Designations		Realistic Unit Capacity at Proposed Designation
			General Plan	Zoning	General Plan	Zoning	
C-6	6.97	Laguna West Town Center	C	LC	HDR	RD-25	146
C-7	5.56	Laguna West Town Center	LI	MP	HDR	RD-25	117
C-8	6.31	Calvine Road east of Elk Grove Florin Road	LDR	RD-7	HDR	RD-25	133
C-9	7.97	Brown Road, south of Calvine Road near Elk Grove Florin Road	LDR	RD-5	HDR	RD-25	167
C-10	7.49	Stonelake, West Taron at Riparian	C	LC	HDR	RD-25	157
C-12	n/a	Southeast Policy Area[1]	HDR	RD-25	HDR	RD-25	1,500
C-13	3.91	Laguna West Town Center	HDR	RD-25	HDR	RD-25	82
C-14	3.92	Laguna West Town Center	HDR	RD-25	HDR	RD-25	82

TABLE 3: EXISTING AND CANDIDATE RHNA SITES ANALYSIS MATRIX

Map ID	Acres	Location	Current Designations		Potential Designations		Realistic Unit Capacity at Proposed Designation
			General Plan	Zoning	General Plan	Zoning	
C-15	2.96	Willard Parkway at Bilby Road	ER	AG-80	HDR	RD-25	62
C-16	3.35		ER	AG-80	HDR	RD-25	70
C-17	2.68		ER	AG-80	HDR	RD-25	56
C-18	9.5		HDR	AG-20	HDR	RD-25	200
C-19	0.9	Laguna Ridge, SW corner of Poppy Ridge and Big Horn	HDR	AG-20	HDR	RD-25	19
C-20	1.6		HDR	AG-20	HDR	RD-25	34
C-21	4.41	Elk Grove Florin Road just south of Calvine	LDR	AR-5	HDR	RD-25	93
C-22	12.61	Brown Road, south of Calvine Road near Elk Grove Florin Road	LDR	AR-5	HDR	RD-25	265

TABLE 3: EXISTING AND CANDIDATE RHNA SITES ANALYSIS MATRIX

Map ID	Acres	Location	Current Designations		Potential Designations		Realistic Unit Capacity at Proposed Designation
			General Plan	Zoning	General Plan	Zoning	
C-23	18.23	Sheldon Road at Vytina Drive	LDR	AR-5	HDR	RD-25	383
C-24	16.26	Elk Grove Boulevard near Laguna Springs Drive (Capital Nursery site)	C	SPALCF/ AR-10	HDR	RD-25	341
C-25	3.39	Elk Grove Boulevard at Backer Ranch (next to Nugget)	HDR	RD-20	HDR	RD-25	71
C-26	5.21	Stonelake, West Taron at Elk Grove Boulevard	C	LC	HDR	RD-25	109
C-27	9.40	Maritime, just west of Harbor Point	LI	MP	HDR	RD-25	197
C-28	2.63	Laguna West Town Center	C	LC	HDR	RD-25	55
C-29	2.0	Laguna West Town Center	C	LC	HDR	RD-25	42
C-30	2.93	Laguna West Town Center	C	LC	HDR	RD-25	62

TABLE 3: EXISTING AND CANDIDATE RHNA SITES ANALYSIS MATRIX

Map ID	Acres	Location	Current Designations		Potential Designations		Realistic Unit Capacity at Proposed Designation
			General Plan	Zoning	General Plan	Zoning	
C-31	3.0	Harbour Point at Maritime	C	TC	HDR	RD-25	63
C-32	3.2	Elk Grove Boulevard, just west of Carlton Plaza	LDR	AR-2	HDR	RD-25	67
C-33	9.8	East Stockton Boulevard at Bow Street	HDR	RD-20	HDR	RD-25	206
C-34	8.14	East Stockton Boulevard south of Bond Road, just north of Premier West Bank	HDR	RD-20	HDR	RD-25	171
C-35	3.74	East Stockton Boulevard at Banff Vista Drive	C	AC	HDR	RD-25	79
C-36	2.97	East Stockton Boulevard just south of Elk Grove Boulevard	C	SC	HDR	RD-25	62
C-37	4.34	East Stockton Boulevard at Hampton Oak Drive	C/O/MF	LC	HDR	RD-25	91
C-39	6.44	Laguna Boulevard and Bruceville Road	C/O/MF	SC	HDR	RD-25	135

TABLE 3: EXISTING AND CANDIDATE RHNA SITES ANALYSIS MATRIX

Map ID	Acres	Location	Current Designations		Potential Designations		Realistic Unit Capacity at Proposed Designation
			General Plan	Zoning	General Plan	Zoning	
C-40	10.34	East Stockton Boulevard south of Calvine	LDR	SPAC99	HDR	RD-25	217
C-41	15.0	Sheldon/Bruceville/Big Horn/Lewis Stein	RR	SPALCF	HDR	RD-25	315

TRIP GENERATION

Table 4 compares daily, AM peak hour, and PM peak hour trip generation of the project sites with the current general plan to the proposed project using trip generation rates published in *Trip Generation, 9th Edition* (Institute of Transportation Engineers, 2012).

As shown in Table 4, the project is expected to increase daily, AM, and PM peak hour trip generation. The proposed project would result in an increase of 2,940 trips per day, 1,190 trip during the AM peak hour, and 40 trips during the PM peak hour. The larger increases in daily and AM peak hour trip generation are due primarily to converting sites with very low residential densities to higher density designation. In comparison, the PM peak hour trip generation does not increase as much due to the conversion of commercial sites to residential uses, since commercial (i.e., retail) land use generates trips at higher rates during the PM peak hour. Detailed trip generation (including trip generation rates) for the 42 project sites is included in Attachment A for Daily, AM peak hour, and PM peak hour conditions.

TABLE 4: TRIP GENERATION COMPARISON

Period		Current General Plan	Proposed Project	Difference (Proposed Project – Current General Plan)
Daily		55,300	58,240	2,940
Peak Hour	AM	2,880	4,070	1,190
	PM	5,090	5,130	40

Notes:

[1] Trip rates from *Trip Generation, 9th ed.* (Institute of Transportation Engineers, 2012). For HDR designation ITE Code 221 (Low-Rise Apartment) was applied. This category generates 6.59 trips per day, 0.46 trips during the AM peak hour, and 0.58 trips during the PM peak hour.

Source: Fehr & Peers, 2013

TRAFFIC OPERATIONS ANALYSIS

This section describes the development of cumulative traffic volume forecasts and resulting roadway segments operations under cumulative conditions without and with the proposed project.

TRAFFIC VOLUME FORECASTS

A modified version of SACOG's 2035 MTP/SCS travel demand forecasting (TDF) model was used to develop cumulative traffic volumes at the study roadway facilities. The TDF model reflects build out development levels in the City of Elk Grove, including development in the Southeast Policy Area, and the City's General Plan transportation system. Year 2035 levels of development are assumed outside the City of Elk Grove. All forecasts are adjusted using a growth increment method (i.e., the difference method) that adds the growth in forecasts travel demand to existing traffic counts.

As expected, traffic volumes increase compared to existing conditions. Traffic volumes on SR 99 show larger increase in what is considered the off-peak direction of flow today (i.e., southbound in the AM peak hour and northbound in the PM peak hour). This is reasonable given the increase in employment land use in the Southeast Policy Area along Kammerer Road.

ROADWAY SEGMENT OPERATIONS

Table 5 summarizes AM and PM peak hour directional traffic volume forecasts, volume-to-capacity (V/C) ratio, and LOS for the study roadway segments under cumulative conditions without and with the proposed project.

TABLE 5: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

Roadway Description				Current General Plan						General Plan Pl			
From	To	# of Lanes	Hourly Per Lane Capacity	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]	PM V/C	PM LOS	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]
anklin Boulevard	Laguna Boulevard	2	990	1,040	0.53	A	820	0.41	A	1,030	0.52	A	840
anklin Boulevard	Laguna Boulevard	2	990	890	0.45	A	1,090	0.55	A	910	0.46	A	1,090
aguna Boulevard	Elk Grove Boulevard	2	990	1,400	0.71	C	1,240	0.63	B	1,390	0.70	C	1,230
aguna Boulevard	Elk Grove Boulevard	2	990	1,220	0.62	B	1,310	0.66	B	1,230	0.62	B	1,310
Elk Grove Boulevard	Kammerer Road	2	990	1,660	0.84	D	1,590	0.80	D	1,660	0.84	D	1,590
Elk Grove Boulevard	Kammerer Road	2	990	1,760	0.89	D	1,560	0.79	C	1,760	0.89	D	1,570
ntage Park Road	Calvine Road	3	990	1,220	0.41	A	1,070	0.36	A	1,220	0.41	A	1,070
ntage Park Road	Calvine Road	3	990	1,200	0.40	A	1,260	0.42	A	1,160	0.39	A	1,280
Calvine Road	Bond Road	3	990	1,090	0.37	A	980	0.33	A	1,100	0.37	A	980
Calvine Road	Bond Road	3	990	960	0.32	A	1,050	0.35	A	930	0.31	A	1,060
Bond Road	Grant Line Road	3	990	780	0.26	A	860	0.29	A	790	0.27	A	860
Bond Road	Grant Line Road	3	990	1,050	0.35	A	890	0.30	A	1,040	0.35	A	890
Jacinto Road	Sheldon Road	3	990	900	0.30	A	890	0.30	A	930	0.31	A	860

TABLE 5: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

Roadway Description				Current General Plan						General Plan Pl			
From	To	# of Lanes	Hourly Per Lane Capacity	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]	PM V/C	PM LOS	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]
Sheldon Road	Laguna Boulevard	3	990	1,930	0.65	B	1,870	0.63	B	1,990	0.67	B	1,870
Sheldon Road	Laguna Boulevard	3	990	1,430	0.48	A	2,150	0.72	C	1,410	0.47	A	2,170
ıguna Boulevard	Elk Grove Boulevard	3	990	1,460	0.49	A	1,720	0.58	A	1,500	0.51	A	1,730
ıguna Boulevard	Elk Grove Boulevard	3	990	1,310	0.44	A	1,830	0.62	B	1,380	0.46	A	1,850
Elk Grove Boulevard	Bilby Road	3	990	1,170	0.39	A	1,100	0.37	A	1,180	0.40	A	1,110
Elk Grove Boulevard	Bilby Road	3	990	1,010	0.34	A	1,620	0.55	A	1,050	0.35	A	1,630
?ower Inn Road	Elk Grove-Florin Road	3	990	1,470	0.49	A	2,180	0.73	C	1,520	0.51	A	2,200
?ower Inn Road	Elk Grove-Florin Road	3	990	2,500	0.84	D	1,960	0.66	B	2,480	0.84	D	2,010
:lk Grove-Florin Road	Bradshaw Road	3	990	670	0.23	A	650	0.22	A	670	0.23	A	650
:lk Grove-Florin Road	Bradshaw Road	3	990	880	0.30	A	890	0.30	A	880	0.30	A	890
3radshaw Road	Grant Line Road	3	990	680	0.23	A	830	0.28	A	680	0.23	A	830
3radshaw Road	Grant Line Road	3	990	630	0.21	A	530	0.18	A	680	0.23	A	530
Sheldon Road	Jacinto Road	3	990	920	0.31	A	1,130	0.38	A	970	0.33	A	1,110
Sheldon Road	Jacinto Road	3	990	1,380	0.46	A	880	0.30	A	1,400	0.47	A	880

TABLE 5: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

Roadway Description				Current General Plan						General Plan Pl			
From	To	# of Lanes	Hourly Per Lane Capacity	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]	PM V/C	PM LOS	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]
Interstate 5	Franklin Boulevard	3	990	2,100	0.71	C	2,090	0.70	C	2,110	0.71	C	2,090
Interstate 5	Franklin Boulevard	3	990	1,990	0.67	B	1,640	0.55	A	1,990	0.67	B	1,670
anklin Boulevard	Bruceville Road	3	990	2,060	0.69	B	1,680	0.57	A	2,110	0.71	C	1,690
anklin Boulevard	Bruceville Road	3	990	1,000	0.34	A	1,790	0.60	B	1,040	0.35	A	1,800
3ruceville Road	Big Horn Boulevard	3	990	2,180	0.73	C	1,860	0.63	B	2,300	0.77	C	1,870
3ruceville Road	Big Horn Boulevard	3	990	1,190	0.40	A	2,330	0.78	C	1,300	0.44	A	2,340
Big Horn Boulevard	East Stockton Boulevard	3	990	1,900	0.64	B	1,900	0.64	B	1,950	0.66	B	1,910
Big Horn Boulevard	East Stockton Boulevard	3	990	1,710	0.58	A	2,080	0.70	C	1,740	0.59	A	2,080
East Stockton Boulevard	Elk Grove-Florin Rd	2	990	1,290	0.65	B	1,360	0.69	B	1,290	0.65	B	1,360
East Stockton Boulevard	Elk Grove-Florin Rd	2	990	1,150	0.58	A	1,350	0.68	B	1,190	0.60	B	1,350
‹ Grove-Florin Rd	Waterman Road	1	990	820	0.83	D	990	1.00	E	830	0.84	D	990
‹ Grove-Florin Rd	Waterman Road	1	990	980	0.99	E	930	0.94	E	980	0.99	E	930
ntage Park Road	Calvine Road	3	990	2170	0.73	C	1950	0.66	B	2190	0.74	C	1920
ntage Park Road	Calvine Road	3	990	2140	0.72	C	2410	0.81	D	2080	0.70	C	2420

TABLE 5: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

Roadway Description		Current General Plan										General Plan Pl	
From	To	# of Lanes	Hourly Per Lane Capacity	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]	PM V/C	PM LOS	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]
Calvine Road	Bond Road	3	990	1,390	0.47	A	1,410	0.47	A	1,420	0.48	A	1,430
Calvine Road	Bond Road	3	990	1,610	0.54	A	1,530	0.52	A	1,620	0.55	A	1,540
Bond Road	Elk Grove Boulevard	2	990	1,000	0.51	A	1,000	0.51	A	1,000	0.51	A	1,000
Bond Road	Elk Grove Boulevard	2	990	1,190	0.60	B	1,010	0.51	A	1,210	0.61	B	1,010
Elk Grove Boulevard	East Stockton Boulevard	1	990	540	0.55	A	630	0.64	B	550	0.56	A	650
Elk Grove Boulevard	East Stockton Boulevard	1	990	470	0.47	A	560	0.57	A	450	0.45	A	550
State Route 99	East Stockton Boulevard	4	990	2670	0.67	B	3760	0.95	**E**	2720	0.69	B	3760
State Route 99	East Stockton Boulevard	4	990	3620	0.91	**E**	3380	0.85	D	3620	0.91	**E**	3390
East Stockton Boulevard	Bradshaw Road	4	990	1,560	0.39	A	2,030	0.51	A	1,590	0.40	A	2,020
East Stockton Boulevard	Bradshaw Road	4	990	2,010	0.51	A	1,760	0.44	A	1,990	0.50	A	1,770
Big Horn Boulevard	Promenade Parkway	3	990	1,700	0.57	A	1,810	0.61	B	1,760	0.59	A	1,810
Big Horn Boulevard	Promenade Parkway	3	990	1,620	0.55	A	1,960	0.66	B	1,650	0.56	A	1,970
Interstate 5	Franklin Boulevard	3	990	1,440	0.48	A	2,300	0.77	C	1,460	0.49	A	2,290
Interstate 5	Franklin Boulevard	3	990	1,510	0.51	A	1,670	0.56	A	1,510	0.51	A	1,660

TABLE 5: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

Roadway Description				Current General Plan						General Plan Pl			
From	To	# of Lanes	Hourly Per Lane Capacity	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]	PM V/C	PM LOS	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]
anklin Boulevard	Bruceville Road	3	990	1,330	0.45	A	2,000	0.67	B	1,330	0.45	A	2,010
anklin Boulevard	Bruceville Road	3	990	1,200	0.40	A	1,570	0.53	A	1,210	0.41	A	1,590
3ruceville Road	Big Horn Boulevard	3	990	1,740	0.59	A	2,510	0.85	D	1,750	0.59	A	2,550
3ruceville Road	Big Horn Boulevard	3	990	1,880	0.63	B	2,050	0.69	B	1,920	0.65	B	2,070
Big Horn Boulevard	East Stockton Boulevard	3	990	2,130	0.72	C	3,400	1.14	**F**	2,200	0.74	C	3,400
Big Horn Boulevard	East Stockton Boulevard	3	990	2,720	0.92	**E**	2,890	0.97	**E**	2,780	0.94	**E**	2,910
Center Parkway	East Stockton Boulevard	3	990	2,470	0.83	D	2,340	0.79	C	2,520	0.85	D	2,360
Center Parkway	East Stockton Boulevard	3	990	1,850	0.62	B	2,610	0.88	D	1,910	0.64	B	2,650
East Stockton Boulevard	Elk Grove-Florin Road	2	990	1,490	0.75	C	1,900	0.96	**E**	1,510	0.76	C	1,910
East Stockton Boulevard	Elk Grove-Florin Road	2	990	2,040	1.03	**F**	1,840	0.93	**E**	2,030	1.03	**F**	1,850
Elk Grove-Florin Road	Bradshaw Road	2	990	1,050	0.53	A	1,070	0.54	A	1,060	0.54	A	1,060
Elk Grove-Florin Road	Bradshaw Road	2	990	980	0.49	A	1,140	0.58	A	950	0.48	A	1,150
Eschinger Road	Grant Line Road	2	2200	2,900	0.66	B	2,950	0.67	B	2,910	0.66	B	2,960
Eschinger Road	Grant Line Road	2	2200	2,680	0.61	B	2,840	0.65	B	2,650	0.60	B	2,810

TABLE 5: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

Roadway Description				Current General Plan						General Plan Pl			
From	To	# of Lanes	Hourly Per Lane Capacity	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]	PM V/C	PM LOS	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]
Grant Line Road	Elk Grove Boulevard	2	2200	2,510	0.57	A	3,330	0.76	C	2,500	0.57	A	3,330
Grant Line Road	Elk Grove Boulevard	2	2200	2,950	0.67	B	2,730	0.62	B	2,890	0.66	B	2,700
Elk Grove Boulevard	Laguna Boulevard	2+HOV GP	2200	3,910 2,620	0.60	A	4,710 3,610	0.72	C	3,880 2,600	0.59	A	4,710 3,160
Elk Grove Boulevard	Laguna Boulevard	2+HOV GP	2200	4,140 2,770	0.63	B	4,090 2,740	0.62	B	4,080 2,730	0.62	B	4,070 2,730
Laguna Boulevard	Sheldon Road	2+HOV GP	2200	4,230 2,830	0.64	B	5,040 3,380	0.77	C	4,250 2,850	0.65	B	5,030 3,370
Laguna Boulevard	Sheldon Road	2+HOV GP	2200	4,790 3,210	0.73	C	4,670 3,130	0.71	C	4,740 3,180	0.72	C	4,630 3,100
Sheldon Road	Calvine Road	2+HOV GP	2200	4,550 3,050	0.69	B	5,350 3,580	0.81	D	4,550 3,050	0.69	B	5,350 3,580
Sheldon Road	Calvine Road	2+HOV GP	2200	4,950 3,320	0.75	C	5,130 3,440	0.78	C	4,810 3,220	0.73	C	5,080 3,400
Calvine Road	Stockton Boulevard	2+HOV GP	2200	5,280 3,540	0.80	C	5,570 3,730	0.85	D	5,490 3,680	0.84	D	5,620 3,770

TABLE 5: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

Roadway Description				Current General Plan						General Plan Pl			
From	To	# of Lanes	Hourly Per Lane Capacity	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]	PM V/C	PM LOS	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]
				3,440			3,810			3,360			3,870
Calvine Road	Vintage Park Road	2	990	780	0.39	A	780	0.39	A	810	0.41	A	770
Calvine Road	Vintage Park Road	2	990	890	0.45	A	810	0.41	A	870	0.44	A	810
Calvine Road	Bond Road	2	990	790	0.40	A	730	0.37	A	810	0.41	A	730
Calvine Road	Bond Road	2	990	840	0.42	A	860	0.43	A	860	0.43	A	870
Bond Road	Grant Line Road	2	990	1,010	0.51	A	1,040	0.53	A	1,040	0.53	A	1,040
Bond Road	Grant Line Road	2	990	960	0.48	A	1,060	0.54	A	980	0.49	A	1,060
win Cities Road	Hood-Franklin Road	2	2200	2,560	0.58	A	2,710	0.62	B	2,530	0.58	A	2,720
Hood-Franklin Road	Twin Cities Road	2	2200	2,300	0.52	A	2,830	0.64	B	2,340	0.53	A	2,850
Hood-Franklin Road	Elk Grove Boulevard	2	2200	2,730	0.62	B	2,780	0.63	B	2,740	0.62	B	2,780
Elk Grove Boulevard	Hood-Franklin Boulevard	2	2200	2,440	0.55	A	2,910	0.66	B	2,500	0.57	A	2,950

TABLE 5: PEAK HOUR ROADWAY SEGMENT OPERATIONS – CUMULATIVE CONDITIONS

Roadway Description				Current General Plan						General Plan Pl			
From	To	# of Lanes	Hourly Per Lane Capacity	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]	PM V/C	PM LOS	AM Volume[1]	AM V/C	AM LOS	PM Volume[1]
Elk Grove Boulevard	Laguna Boulevard	2	2200	3,270	0.74	C	3,700	0.84	D	3,300	0.75	C	3,690
aguna Boulevard	Elk Grove Boulevard	2	2200	3,230	0.73	C	3,480	0.79	C	3,240	0.74	C	3,580
aguna Boulevard	Pocket Road	3	2200	3,940	0.60	A	4,540	0.69	B	4,060	0.62	B	4,500
Pocket Road	Laguna Boulevard	3	2200	4,970	0.75	C	4,230	0.64	B	4,950	0.75	C	4,340

rpose (GP) volumes after accounting for traffic volume in HOV lane.

However, the following roadway segments would operate unacceptably at LOS E or F under cumulative conditions both with and without the addition of the proposed project:

City of Elk Grove Roadways

- Elk Grove Boulevard (Eastbound) – Elk Grove-Florin Road to Waterman Road (LOS E during the PM peak hour)
- Elk Grove Boulevard (Westbound) – Elk Grove-Florin Road to Waterman Road (LOS E during the AM and PM peak hours)
- Grant Line Road (Eastbound) – SR 99 to East Stockton Boulevard (LOS E during the PM peak hour)
- Grant Line Road (Westbound) – SR 99 to East Stockton Boulevard (LOS E during the AM peak hour)
- Laguna Boulevard (Eastbound) – Big Horn Boulevard to East Stockton Boulevard (LOS F during the PM peak hour)
- Laguna Boulevard (Westbound) – Big Horn Boulevard to East Stockton Boulevard (LOS E during the AM and PM peak hours)
- Sheldon Road (Eastbound) – East Stockton Boulevard to Elk Grove-Florin Road (LOS E during the PM peak hour)
- Sheldon Road (Westbound) – East Stockton Boulevard to Elk Grove-Florin Road (LOS F during the AM peak hour and LOS E during the and PM peak hour)

The sections of Elk Grove Boulevard, Grant Line Road, Laguna Boulevard, and Sheldon Road identified above are constructed to their general plan designation. Additional right-of-way for expanding these roadways is not available without impacting adjacent development. All of these segments were identified in the General Plan Background Report as operating worse than LOS D. Consistent with Policy CI-14, the City recognizes that level of service D may not be achieved on some roadway segments. Since these roadways are constructed to their general plan designation, they are consistent with Policy CI-14. As shown in Table 5, the addition of the proposed project would not result in any unacceptable roadway operations (i.e., LOS E or F) on City roadways or SR 99 or increase

the volume-to-capacity ratio by 0.05 or more compared to the current general plan. Therefore, this would be a less than significant impact.

SR 99 and I-5

As documented under existing conditions, congested conditions occur on SR 99 and I-5 under existing conditions due to bottlenecks that cause vehicle queuing on SR 99 and I-5 during the morning and evening peak periods. The addition of the proposed project will exacerbate these conditions.

General Policy CI-2 relates to coordination and participation with the City of Sacramento, Sacramento County, and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations, including joint transportation planning efforts, roadway construction and funding. Consistent with Policy CI-2, the City should continue to work with Caltrans and other affected agencies to address operational conditions on SR 99 and I-5. This commitment to improving operation on SR 99 and I-5 in the City is also demonstrated with Policy CI-11, related to implementing improvements to I-5 and SR 99, and Policy CI-12, related to the Capital SouthEast Connector project. However, since SR 99 and I-5 are under the jurisdiction of Caltrans, these facilities are outside the City's jurisdiction to implements improvements that would mitigate these impacts. Therefore, these impacts would be significant and unavoidable.

BICYCLE AND PEDESTRIAN FACILITIES

Implementation of the proposed project would result in increased pedestrian and bicycle use in the City. However, the City's General Plan includes policy that supports development of an integrated, multimodal circulation system to accommodate transit, bicycles, and pedestrians, including Policy CI-3, CI-4, and CI-5, which include actions to implement transportation alternatives to the automobile. However, implementation of the proposed project would not disrupt or interfere with existing bicycle or pedestrian facilities, and would not disrupt or interfere with the implementation of any planned bicycle or pedestrian facilities.

TRANSIT FACILITIES

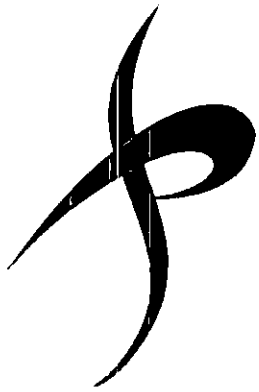
Implementation of the proposed project would result in increased transit ridership. However, the City's General Plan includes policy that supports development of an integrated, multimodal

circulation system to accommodate transit, including Policy CI-3, CI-4, CI-5, CI-6, CI-7, which include actions to implement transportation alternatives to the automobile. The proposed project would locate higher density residential along major transportation facilities with existing transit service and along planned transportation corridors that will support transit service, like Big Horn Boulevard in the Laguna Ridge Specific Plan and the Southeast Policy Area that are being planned to accommodate the planned extension of light rail.

Funding for transit operations and maintenance includes two sources from the Transportation Development Act (TDA) that are based in part of local sales tax revenue, with allocation based on population and transit operator revenue. Historically, TDA funds have kept pace with inflation. In addition, since a portion of the funding is indexed to population, it is reasonable to expect that funding for expanded transit service will be available to maintain a balance of demand and capacity.

Consequently, implementation of the proposed project would not disrupt or interfere with existing bicycle or pedestrian facilities, and would not disrupt or interfere with the implementation of any planned bicycle or pedestrian facilities.

APPENDIX A: TRIP GENERATION COMPARISON



	General Plan	Zoning	Maximum Dwelling Units Per Acre	Maximum Dwelling Units	Employment	1,000 Square Feet of Use	General Plan	Zoning	Maximum Dwelling Units Per Acre	Maximum Dwelling Units	Residential		Non-Residential	Residential		Non-Residential	Residential		Non-Residential	Current General Plan
											Single Family	Multi-Family		Single Family	Multi-Family		Single Family	Multi-Family		
/Poppy	HDR	RD-20	20	248			HDR	RD-25	25	310	9.52	6.59		0.75	0.46		1.00	0.58		1,634
ad and	HDR	RD-20	20	280			HDR	RD-25	25	350	9.52	6.59		0.75	0.46		1.00	0.58		1,845
Bliby	HDR	RD-15	15	144			HDR	RD-25	25	240	9.52	6.59		0.75	0.46		1.00	0.58		1,368
and site	HDR	RD-20	20	230			HDR	RD-25	25	288	9.52	6.59		0.75	0.46		1.00	0.58		1,516
	HDR	RD-20	20	300			HDR	RD-25	25	375	9.52	6.59		0.75	0.46		1.00	0.58		1,977
	C/O/MF	SC(MF)	20	58	139	58.9	HDR	RD-25	25	218	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	2,898
d	MDR	SPAC99	15	130			HDR	RD-25	25	217	9.52	6.59		0.75	0.46		1.00	0.58		1,240
	C	LC			215	91.5	HDR	RD-25	25	187	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	3,908
	HDR	RD-25	25	98			HDR	RD-25	25	98	9.52	6.59		0.75	0.46		1.00	0.58		644
	HDR	RD-25	25	98			HDR	RD-25	25	98	9.52	6.59		0.75	0.46		1.00	0.58		646
	ER	AG-80	4	12			HDR	RD-25	25	74	9.52	6.59		0.75	0.46		1.00	0.58		113
	ER	AG-80	4	13			HDR	RD-25	25	84	9.52	6.59		0.75	0.46		1.00	0.58		128
	ER	AG-80	4	11			HDR	RD-25	25	67	9.52	6.59		0.75	0.46		1.00	0.58		102
nd Big	HDR	AG-20	20	190			HDR	RD-25	25	238	9.52	6.59		0.75	0.46		1.00	0.58		1,252
nd Big	HDR	AG-20	20	18			HDR	RD-25	25	23	9.52	6.59		0.75	0.46		1.00	0.58		119
	RR	SPALCF	0.5	3			HDR	RD-25	25	163	9.52	6.59		0.75	0.46		1.00	0.58		31
nd Big	HDR	AG-20	20	32			HDR	RD-25	25	40	9.52	6.59		0.75	0.46		1.00	0.58		211
	LDR	AR-5	0.2	1			HDR	RD-25	25	110	9.52	6.59		0.75	0.46		1.00	0.58		8
Grove	LDR	AR-5	0.2	3			HDR	RD-25	25	315	9.52	6.59		0.75	0.46		1.00	0.58		24
	LDR	AR-5	0.2	4			HDR	RD-25	25	456	9.52	6.59		0.75	0.46		1.00	0.58		35
ive	C	SPALCF/ AR-10	0.1	1.626			HDR	RD-25	25	407	9.52	6.59		0.75	0.46		1.00	0.58		15
to	HDR	RD-20	20	67.8			HDR	RD-25	25	85	9.52	6.59		0.75	0.46		1.00	0.58		645
d	C	LC			150	63.7	HDR	RD-25	25	130	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	2,718
	LI	MP			382	305.6	HDR	RD-25	25	235	9.52	6.59	6.97	0.75	0.46	0.92	1.00	0.58	0.97	2,130
	C	LC			76	32.1	HDR	RD-25	25	66	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	1,372
	C	LC			58	24.4	HDR	RD-25	25	50	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	1,043
	C	LC			84	35.8	HDR	RD-25	25	73	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	1,529
	C	TC			104	44.1	HDR	RD-25	25	75	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	
iza	LDR	AR-2	0.5	2			HDR	RD-25	25	80	9.52	6.59		0.75	0.46		1.00	0.58		15
	HDR	RD-20	20	196			HDR	RD-25	25	245	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	1,292
d, just	HDR	RD-20	20	163			HDR	RD-25	25	204	9.52	6.59		0.75	0.46		1.00	0.58		1,073
	C	AC			81	28.4	HDR	RD-25	25	94	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	1,211
ve	C/O/MF	LC			85	36.1	HDR	RD-25	25	74	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	1,543
rive	C	SC			104	44.2	HDR	RD-25	25	109	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	1,887
	C/O/MF	SC			154	65.4	HDR	RD-25	25	161	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	2,793
	LDR	SPAC99	7	72			HDR	RD-25	25	259	9.52	6.59		0.75	0.46		1.00	0.58		689
	RR	SPALCF	0.5	8			HDR	RD-25	25	375	9.52	6.59		0.75	0.46		1.00	0.58		71
	C	LC			200	85.2	HDR	RD-25	25	174	9.52	6.59	42.70	0.75	0.46	0.96	1.00	0.58	3.71	3,637
	LI	MP			226	180.6	HDR	RD-25	25	139	9.52	6.59	6.97	0.75	0.46	0.92	1.00	0.58	0.97	1,259
	LDR	RD-7	7	44			HDR	RD-25	25	158	9.52	6.59		0.75	0.46		1.00	0.58		420
Grove	LDR	RD-5	5	40			HDR	RD-25	25	199	9.52	6.59		0.75	0.46		1.00	0.58		379
	HDR	RD-25	25	1500			HDR	RD-25	25	1500	9.52	6.59		0.75	0.46		1.00	0.58		9,885
																			Total	**55,300**
																			Difference (Proposed General Plan - Current General Plan)	

APPENDIX D

Noise Study Data

Appendix D-1.1
FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2013-169 Elk Grove Housing Development
Description: Existing Traffic
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	12,080	83		17	1.0	0.5	45	100	-5
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	10,480	83		17	1.0	0.5	45	100	-5
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	10,370	83		17	1.0	0.5	45	100	-5
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	12,330	83		17	1.0	0.5	55	100	-5
5	Bradshaw Road	Calvine Rd to Bond Rd	8,770	83		17	1.0	0.5	55	150	0
6	Bradshaw Road	Bond Rd to Grant Line Rd	8,765	83		17	1.0	0.5	55	100	-5
7	Bruceville Road	Jacinto Rd to Sheldon Rd	14,565	83		17	1.0	0.5	40	100	-5
8	Bruceville Road	Sheldon Rd to Laguna Blvd	27,120	83		17	1.0	0.5	45	100	-5
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	17,915	83		17	1.0	0.5	45	100	-5
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	17,460	83		17	1.0	0.5	45	100	-5
11	Calvine Road	Power Inn Rd to Elk Grove- Florin	37,650	83		17	1.0	0.5	45	100	-5
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw I	14,450	83		17	1.0	0.5	45	100	-5
13	Calvine Road	Bradshaw Rd to Grant Line Rd	12,600	83		17	1.0	0.5	55	100	-5
14	Center Parkway	Sheldon Rd to Jacinto Rd	13,800	83		17	1.0	0.5	40	100	-5
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	35,405	83		17	1.0	0.5	45	100	-5
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	26,895	83		17	1.0	0.5	50	100	-5
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	29,120	83		17	1.0	0.5	50	100	-5
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	33,500	83		17	1.0	0.5	50	150	-5
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Flor	24,715	83		17	1.0	0.5	35	75	0
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman	11,515	83		17	1.0	0.5	25	60	0
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	31,945	83		17	1.0	0.5	45	100	-5
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	22,895	83		17	1.0	0.5	45	100	-5
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	18,415	83		17	1.0	0.5	35	60	-5
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvc	7,290	83		17	1.0	0.5	35	50	-5
25	Grant Line Road	State Route 99 to E. Stockton Blvc	15,365	83		17	1.0	0.5	45	100	0

Appendix D-1.2

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2013-169 Elk Grove Housing Development
Description: Existing Traffic
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	57.7	46.0	47.5	58.3
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	57.1	45.4	46.9	57.7
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	57.0	45.3	46.8	57.7
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	60.3	47.5	48.4	60.8
5	Bradshaw Road	Calvine Rd to Bond Rd	61.2	48.3	49.3	61.6
6	Bradshaw Road	Bond Rd to Grant Line Rd	58.8	46.0	46.9	59.3
7	Bruceville Road	Jacinto Rd to Sheldon Rd	57.0	46.0	47.8	57.8
8	Bruceville Road	Sheldon Rd to Laguna Blvd	61.2	49.5	51.0	61.9
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	59.4	47.7	49.2	60.1
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	59.3	47.6	49.1	59.9
11	Calvine Road	Power Inn Rd to Elk Grove- Florin Rd	62.6	50.9	52.4	63.3
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw Rd	58.5	46.8	48.3	59.1
13	Calvine Road	Bradshaw Rd to Grant Line Rd	60.4	47.5	48.5	60.9
14	Center Parkway	Sheldon Rd to Jacinto Rd	56.8	45.8	47.6	57.6
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	62.4	50.7	52.2	63.0
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	62.5	50.2	51.4	63.0
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	62.8	50.5	51.7	63.4
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	60.8	48.5	49.7	61.4
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Florin Rd	64.5	54.3	56.5	65.5
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman Rd	58.5	50.1	54.8	60.4
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	61.9	50.2	51.7	62.6
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	60.5	48.8	50.3	61.1
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	59.7	49.5	51.6	60.7
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvd	56.9	46.6	48.8	57.8
25	Grant Line Road	State Route 99 to E. Stockton Blvd	63.7	52.0	53.5	64.4

Appendix D-1.3

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2013-169 Elk Grove Housing Development
Description: Existing Traffic
Ldn/CNEL: Ldn
Hard/Soft: Soft

			-------- Distances to Traffic Noise Contours --------				
Segment	Roadway Name	Segment Description	75	70	65	60	55
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	8	17	36	78	167
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	7	15	33	71	152
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	7	15	33	70	151
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	11	24	52	112	242
5	Bradshaw Road	Calvine Rd to Bond Rd	19	42	90	193	416
6	Bradshaw Road	Bond Rd to Grant Line Rd	9	19	42	90	193
7	Bruceville Road	Jacinto Rd to Sheldon Rd	7	15	33	72	154
8	Bruceville Road	Sheldon Rd to Laguna Blvd	13	29	62	133	287
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	10	22	47	101	217
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	10	21	46	99	214
11	Calvine Road	Power Inn Rd to Elk Grove- Florin Rd	17	36	77	166	357
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw Rd	9	19	41	87	188
13	Calvine Road	Bradshaw Rd to Grant Line Rd	11	25	53	114	246
14	Center Parkway	Sheldon Rd to Jacinto Rd	7	15	32	69	149
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	16	34	74	159	342
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	16	34	74	159	343
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	17	36	78	168	362
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	18	40	86	185	398
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Florin Rd	17	38	81	174	376
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman Rd	6	14	30	64	138
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	15	32	69	148	320
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	12	26	55	119	256
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	7	14	31	67	143
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvd	4	8	17	36	77
25	Grant Line Road	State Route 99 to E. Stockton Blvd	20	42	91	196	423

Appendix D-1.4
FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2013-169 Elk Grove Housing Development
Description: Existing Traffic
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
26	Grant Line Road	E. Stockton Blvd to Bradshaw R(	36,680	83		17	1.0	0.5	55	100	-5
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkv	5,705	83		17	1.0	0.5	55	60	0
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	31,230	83		17	1.0	0.5	45	100	-5
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	23,940	83		17	1.0	0.5	45	100	-5
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	29,265	83		17	1.0	0.5	45	100	-5
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blv	41,025	83		17	1.0	0.5	45	100	0
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	25,330	83		17	1.0	0.5	45	100	-5
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Fl	20,970	83		17	1.0	0.5	45	70	-5
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw	9,180	83		17	5.0	10.0	45	100	0
35	State Route 99	Eschinger Rd to Grant Line Rd	49,150	83		17	5.0	10.0	65	220	0
36	State Route 99	Grant Line Rd to Elk Grove Blvd	42,250	83		17	5.0	10.0	65	140	-5
37	State Route 99	Elk Grove Blvd to Laguna Blvd	64,450	83		17	5.0	10.0	65	150	-5
38	State Route 99	Laguna Blvd to Sheldon Rd	80,890	83		17	5.0	10.0	65	200	-5
39	State Route 99	Sheldon Rd to Calvine Rd	87,460	83		17	2.0	5.0	65	140	-5
40	State Route 99	Calvine Rd to Stockton Blvd	100,610	83		17	2.0	5.0	65	170	0
41	Waterman Road	Calvine Rd to Vintage Park Rd	8,770	83		17	1.0	0.5	45	60	-5
42	Waterman Road	Calvine Rd to Bond Rd	8,280	83		17	1.0	0.5	55	60	-5
43	Waterman Road	Bond Road to Grant Line Rd	10,710	83		17	1.0	0.5	50	60	-5
44	Interste 5	Twin Cities to Hood Franklin	34,750	80		20	3.0	10.0	65	200	0
45	Interste 5	Hood Franklin to Elk Grove	38,900	80		20	3.0	10.0	65	250	-5
46	Interste 5	Elk Grove to Laguna	49,365	80		20	3.0	10.0	65	230	-5
47	Interste 5	Laguna to Pocket	73,070	80		20	3.0	10.0	65	210	-5

Appendix D-1.5

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2013-169 Elk Grove Housing Development
Description: Existing Traffic
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
26	Grant Line Road	E. Stockton Blvd to Bradshaw Rd	65.0	52.2	53.1	65.5
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkwy	65.3	52.4	53.4	65.7
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	61.8	50.1	51.6	62.5
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	60.7	49.0	50.5	61.3
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	61.5	49.8	51.3	62.2
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blvd	68.0	56.3	57.8	68.7
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	60.9	49.2	50.7	61.6
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Florin Rd	62.4	50.7	52.2	63.1
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw Rd	60.9	56.8	64.3	66.4
35	State Route 99	Eschinger Rd to Grant Line Rd	67.6	61.4	67.9	71.3
36	State Route 99	Grant Line Rd to Elk Grove Blvd	64.9	58.7	65.2	68.5
37	State Route 99	Elk Grove Blvd to Laguna Blvd	66.3	60.1	66.6	69.9
38	State Route 99	Laguna Blvd to Sheldon Rd	65.4	59.2	65.7	69.0
39	State Route 99	Sheldon Rd to Calvine Rd	68.4	57.9	65.4	70.4
40	State Route 99	Calvine Rd to Stockton Blvd	72.8	62.3	69.7	74.8
41	Waterman Road	Calvine Rd to Vintage Park Rd	59.6	47.9	49.4	60.3
42	Waterman Road	Calvine Rd to Bond Rd	61.9	49.1	50.0	62.4
43	Waterman Road	Bond Road to Grant Line Rd	61.8	49.5	50.7	62.4
44	Interste 5	Twin Cities to Hood Franklin	67.3	58.8	67.5	70.7
45	Interste 5	Hood Franklin to Elk Grove	61.3	52.8	61.5	64.7
46	Interste 5	Elk Grove to Laguna	62.9	54.4	63.1	66.3
47	Interste 5	Laguna to Pocket	65.2	56.7	65.4	68.6

Appendix D-1.6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2013-169 Elk Grove Housing Development
Description: Existing Traffic
Ldn/CNEL: Ldn
Hard/Soft: Soft

			-------- Distances to Traffic Noise Contours --------				
Segment	Roadway Name	Segment Description	75	70	65	60	55
26	Grant Line Road	E. Stockton Blvd to Bradshaw Rd	23	50	108	233	501
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkwy	14	31	67	145	312
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	15	31	68	146	315
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	12	26	57	122	264
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	14	30	65	140	301
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blvd	38	81	175	378	813
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	13	27	59	127	274
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Florin Rd	11	24	52	112	241
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw Rd	27	58	125	268	578
35	State Route 99	Eschinger Rd to Grant Line Rd	124	267	575	1239	2669
36	State Route 99	Grant Line Rd to Elk Grove Blvd	52	112	241	520	1120
37	State Route 99	Elk Grove Blvd to Laguna Blvd	69	148	320	689	1484
38	State Route 99	Laguna Blvd to Sheldon Rd	80	173	372	801	1727
39	State Route 99	Sheldon Rd to Calvine Rd	69	150	322	694	1496
40	State Route 99	Calvine Rd to Stockton Blvd	164	354	762	1642	3538
41	Waterman Road	Calvine Rd to Vintage Park Rd	6	13	29	63	135
42	Waterman Road	Calvine Rd to Bond Rd	9	19	40	86	186
43	Waterman Road	Bond Road to Grant Line Rd	9	19	40	86	186
44	Interste 5	Twin Cities to Hood Franklin	103	222	478	1030	2218
45	Interste 5	Hood Franklin to Elk Grove	52	111	239	515	1110
46	Interste 5	Elk Grove to Laguna	60	130	280	604	1301
47	Interste 5	Laguna to Pocket	78	169	364	784	1690

Appendix D-1.7
FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	19,200	83		17	1.0	0.5	45	100	-5
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	25,850	83		17	1.0	0.5	45	100	-5
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	32,850	83		17	1.0	0.5	45	100	-5
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	23,750	83		17	1.0	0.5	55	100	-5
5	Bradshaw Road	Calvine Rd to Bond Rd	20,400	83		17	1.0	0.5	55	150	0
6	Bradshaw Road	Bond Rd to Grant Line Rd	17,900	83		17	1.0	0.5	55	100	-5
7	Bruceville Road	Jacinto Rd to Sheldon Rd	18,450	83		17	1.0	0.5	40	100	-5
8	Bruceville Road	Sheldon Rd to Laguna Blvd	36,900	83		17	1.0	0.5	45	100	-5
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	31,600	83		17	1.0	0.5	45	100	-5
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	24,500	83		17	1.0	0.5	45	100	-5
11	Calvine Road	Power Inn Rd to Elk Grove- Florin	40,550	83		17	1.0	0.5	45	100	-5
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw I	15,450	83		17	1.0	0.5	45	100	-5
13	Calvine Road	Bradshaw Rd to Grant Line Rd	13,350	83		17	1.0	0.5	55	100	-5
14	Center Parkway	Sheldon Rd to Jacinto Rd	21,550	83		17	1.0	0.5	40	100	-5
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	39,100	83		17	1.0	0.5	45	100	-5
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	32,650	83		17	1.0	0.5	50	100	-5
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	37,800	83		17	1.0	0.5	50	100	-5
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	37,950	83		17	1.0	0.5	50	150	-5
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Flor	25,750	83		17	1.0	0.5	35	75	0
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman	18,600	83		17	1.0	0.5	25	60	0
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	43,350	83		17	1.0	0.5	45	100	-5
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	29,700	83		17	1.0	0.5	45	100	-5
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	21,000	83		17	1.0	0.5	35	60	-5
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvc	11,000	83		17	1.0	0.5	35	50	-5
25	Grant Line Road	State Route 99 to E. Stockton Blvc	67,150	83		17	1.0	0.5	45	100	0

Appendix D-1.8

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	59.7	48.0	49.5	60.4
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	61.0	49.3	50.8	61.6
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	62.0	50.3	51.8	62.7
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	63.1	50.3	51.2	63.6
5	Bradshaw Road	Calvine Rd to Bond Rd	64.8	52.0	52.9	65.3
6	Bradshaw Road	Bond Rd to Grant Line Rd	61.9	49.1	50.0	62.4
7	Bruceville Road	Jacinto Rd to Sheldon Rd	58.1	47.0	48.9	58.8
8	Bruceville Road	Sheldon Rd to Laguna Blvd	62.5	50.9	52.3	63.2
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	61.9	50.2	51.7	62.5
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	60.8	49.1	50.6	61.4
11	Calvine Road	Power Inn Rd to Elk Grove- Florin Rd	62.9	51.3	52.7	63.6
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw Rd	58.8	47.1	48.6	59.4
13	Calvine Road	Bradshaw Rd to Grant Line Rd	60.6	47.8	48.7	61.1
14	Center Parkway	Sheldon Rd to Jacinto Rd	58.7	47.7	49.5	59.5
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	62.8	51.1	52.6	63.4
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	63.3	51.0	52.2	63.9
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	64.0	51.7	52.9	64.5
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	61.3	49.0	50.2	61.9
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Florin Rd	64.7	54.5	56.6	65.7
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman Rd	60.5	52.2	56.8	62.5
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	63.2	51.6	53.0	63.9
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	61.6	49.9	51.4	62.3
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	60.3	50.0	52.2	61.2
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvd	58.7	48.4	50.6	59.6
25	Grant Line Road	State Route 99 to E. Stockton Blvd	70.1	58.5	59.9	70.8

Appendix D-1.9

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan
Ldn/CNEL: Ldn
Hard/Soft: Soft

			-------- Distances to Traffic Noise Contours --------				
Segment	Roadway Name	Segment Description	75	70	65	60	55
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	11	23	49	106	228
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	13	28	60	129	278
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	15	33	70	151	326
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	17	38	81	174	375
5	Bradshaw Road	Calvine Rd to Bond Rd	34	73	157	339	730
6	Bradshaw Road	Bond Rd to Grant Line Rd	14	31	67	144	311
7	Bruceville Road	Jacinto Rd to Sheldon Rd	8	18	39	84	180
8	Bruceville Road	Sheldon Rd to Laguna Blvd	16	35	76	163	352
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	15	32	68	147	317
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	12	27	58	124	268
11	Calvine Road	Power Inn Rd to Elk Grove- Florin Rd	17	37	81	174	375
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw Rd	9	20	42	91	197
13	Calvine Road	Bradshaw Rd to Grant Line Rd	12	26	55	119	255
14	Center Parkway	Sheldon Rd to Jacinto Rd	9	20	43	93	200
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	17	37	79	170	366
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	18	39	84	181	391
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	20	43	93	200	431
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	20	43	93	201	432
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Florin Rd	18	39	83	179	386
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman Rd	9	19	41	88	190
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	18	39	84	182	392
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	14	30	66	141	304
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	7	16	34	73	157
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvd	5	10	22	47	102
25	Grant Line Road	State Route 99 to E. Stockton Blvd	52	113	243	524	1130

Appendix D-1.10
FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
26	Grant Line Road	E. Stockton Blvd to Bradshaw R	36,800	83		17	1.0	0.5	55	100	-5
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkv	35,450	83		17	1.0	0.5	55	60	0
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	34,600	83		17	1.0	0.5	45	100	-5
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	30,500	83		17	1.0	0.5	45	100	-5
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	40,900	83		17	1.0	0.5	45	100	-5
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blv	55,700	83		17	1.0	0.5	45	100	0
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	46,350	83		17	1.0	0.5	45	100	-5
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Fl	36,350	83		17	1.0	0.5	45	70	-5
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw	21,200	83		17	5.0	10.0	45	100	0
35	State Route 99	Eschinger Rd to Grant Line Rd	56,850	83		17	5.0	10.0	65	220	0
36	State Route 99	Grant Line Rd to Elk Grove Blvd	57,600	83		17	5.0	10.0	65	140	-5
37	State Route 99	Elk Grove Blvd to Laguna Blvd	84,250	83		17	5.0	10.0	65	150	-5
38	State Route 99	Laguna Blvd to Sheldon Rd	93,650	83		17	5.0	10.0	65	200	-5
39	State Route 99	Sheldon Rd to Calvine Rd	99,900	83		17	2.0	5.0	65	140	-5
40	State Route 99	Calvine Rd to Stockton Blvd	108,400	83		17	2.0	5.0	65	170	0
41	Waterman Road	Calvine Rd to Vintage Park Rd	16,300	83		17	1.0	0.5	45	60	-5
42	Waterman Road	Calvine Rd to Bond Rd	16,100	83		17	1.0	0.5	55	60	-5
43	Waterman Road	Bond Road to Grant Line Rd	20,350	83		17	1.0	0.5	50	60	-5
44	Interste 5	Twin Cities to Hood Franklin	52,000	80		20	3.0	10.0	65	200	0
45	Interste 5	Hood Franklin to Elk Grove	54,300	80		20	3.0	10.0	65	250	-5
46	Interste 5	Elk Grove to Laguna	68,400	80		20	3.0	10.0	65	230	-5
47	Interste 5	Laguna to Pocket	88,400	80		20	3.0	10.0	65	210	-5

Appendix D-1.11

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
26	Grant Line Road	E. Stockton Blvd to Bradshaw Rd	65.0	52.2	53.1	65.5
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkwy	73.2	60.4	61.3	73.7
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	62.3	50.6	52.1	62.9
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	61.7	50.0	51.5	62.4
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	63.0	51.3	52.8	63.6
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blvd	69.3	57.6	59.1	70.0
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	63.5	51.8	53.3	64.2
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Florin Rd	64.8	53.1	54.6	65.5
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw Rd	64.5	60.4	67.9	70.1
35	State Route 99	Eschinger Rd to Grant Line Rd	68.2	62.1	68.6	71.9
36	State Route 99	Grant Line Rd to Elk Grove Blvd	66.2	60.1	66.6	69.9
37	State Route 99	Elk Grove Blvd to Laguna Blvd	67.4	61.3	67.8	71.1
38	State Route 99	Laguna Blvd to Sheldon Rd	66.0	59.9	66.3	69.7
39	State Route 99	Sheldon Rd to Calvine Rd	69.0	58.5	65.9	71.0
40	State Route 99	Calvine Rd to Stockton Blvd	73.1	62.6	70.0	75.1
41	Waterman Road	Calvine Rd to Vintage Park Rd	62.3	50.6	52.1	63.0
42	Waterman Road	Calvine Rd to Bond Rd	64.8	51.9	52.9	65.3
43	Waterman Road	Bond Road to Grant Line Rd	64.6	52.3	53.5	65.2
44	Interste 5	Twin Cities to Hood Franklin	69.0	60.5	69.2	72.4
45	Interste 5	Hood Franklin to Elk Grove	62.7	54.3	63.0	66.2
46	Interste 5	Elk Grove to Laguna	64.3	55.8	64.5	67.7
47	Interste 5	Laguna to Pocket	66.0	57.5	66.2	69.4

Appendix D-1.12

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	-------- Distances to Traffic Noise Contours --------				
			75	70	65	60	55
26	Grant Line Road	E. Stockton Blvd to Bradshaw Rd	23	50	108	233	502
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkwy	49	106	227	490	1056
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	16	34	73	156	337
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	14	31	67	144	310
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	17	38	81	175	377
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blvd	46	100	215	463	997
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	19	41	88	190	410
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Florin Rd	16	35	75	162	348
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw Rd	47	101	218	469	1010
35	State Route 99	Eschinger Rd to Grant Line Rd	136	294	634	1365	2941
36	State Route 99	Grant Line Rd to Elk Grove Blvd	64	138	297	639	1377
37	State Route 99	Elk Grove Blvd to Laguna Blvd	82	177	382	824	1774
38	State Route 99	Laguna Blvd to Sheldon Rd	88	190	410	884	1904
39	State Route 99	Sheldon Rd to Calvine Rd	76	163	352	759	1635
40	State Route 99	Calvine Rd to Stockton Blvd	173	372	801	1726	3719
41	Waterman Road	Calvine Rd to Vintage Park Rd	9	20	44	95	204
42	Waterman Road	Calvine Rd to Bond Rd	13	29	62	134	289
43	Waterman Road	Bond Road to Grant Line Rd	13	29	61	132	285
44	Interste 5	Twin Cities to Hood Franklin	135	290	625	1347	2902
45	Interste 5	Hood Franklin to Elk Grove	64	139	299	644	1386
46	Interste 5	Elk Grove to Laguna	75	162	348	751	1617
47	Interste 5	Laguna to Pocket	89	192	413	891	1919

Appendix D-1.13
FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	19,350	83		17	1.0	0.5	45	100	-5
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	25,800	83		17	1.0	0.5	45	100	-5
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	32,900	83		17	1.0	0.5	45	100	-5
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	23,650	83		17	1.0	0.5	55	100	-5
5	Bradshaw Road	Calvine Rd to Bond Rd	20,350	83		17	1.0	0.5	55	150	0
6	Bradshaw Road	Bond Rd to Grant Line Rd	17,900	83		17	1.0	0.5	55	100	-5
7	Bruceville Road	Jacinto Rd to Sheldon Rd	18,500	83		17	1.0	0.5	40	100	-5
8	Bruceville Road	Sheldon Rd to Laguna Blvd	37,200	83		17	1.0	0.5	45	100	-5
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	32,300	83		17	1.0	0.5	45	100	-5
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	24,850	83		17	1.0	0.5	45	100	-5
11	Calvine Road	Power Inn Rd to Elk Grove- Florin	41,050	83		17	1.0	0.5	45	100	-5
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw I	15,450	83		17	1.0	0.5	45	100	-5
13	Calvine Road	Bradshaw Rd to Grant Line Rd	13,600	83		17	1.0	0.5	55	100	-5
14	Center Parkway	Sheldon Rd to Jacinto Rd	21,800	83		17	1.0	0.5	40	100	-5
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	39,300	83		17	1.0	0.5	45	100	-5
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	33,200	83		17	1.0	0.5	50	100	-5
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	39,050	83		17	1.0	0.5	50	100	-5
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	38,400	83		17	1.0	0.5	50	150	-5
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Flor	25,950	83		17	1.0	0.5	35	75	0
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman	18,650	83		17	1.0	0.5	25	60	0
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	43,050	83		17	1.0	0.5	45	100	-5
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	30,050	83		17	1.0	0.5	45	100	-5
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	21,100	83		17	1.0	0.5	35	60	-5
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvc	11,000	83		17	1.0	0.5	35	50	-5
25	Grant Line Road	State Route 99 to E. Stockton Blvc	67,450	83		17	1.0	0.5	45	100	0

Appendix D-1.14

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	59.7	48.0	49.5	60.4
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	61.0	49.3	50.8	61.6
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	62.0	50.4	51.8	62.7
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	63.1	50.3	51.2	63.6
5	Bradshaw Road	Calvine Rd to Bond Rd	64.8	52.0	52.9	65.3
6	Bradshaw Road	Bond Rd to Grant Line Rd	61.9	49.1	50.0	62.4
7	Bruceville Road	Jacinto Rd to Sheldon Rd	58.1	47.1	48.9	58.9
8	Bruceville Road	Sheldon Rd to Laguna Blvd	62.6	50.9	52.4	63.2
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	62.0	50.3	51.8	62.6
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	60.8	49.1	50.6	61.5
11	Calvine Road	Power Inn Rd to Elk Grove- Florin Rd	63.0	51.3	52.8	63.7
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw Rd	58.8	47.1	48.6	59.4
13	Calvine Road	Bradshaw Rd to Grant Line Rd	60.7	47.9	48.8	61.2
14	Center Parkway	Sheldon Rd to Jacinto Rd	58.8	47.8	49.6	59.6
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	62.8	51.1	52.6	63.5
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	63.4	51.1	52.3	64.0
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	64.1	51.8	53.0	64.7
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	61.4	49.1	50.3	61.9
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Florin Rd	64.7	54.5	56.7	65.7
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman Rd	60.5	52.2	56.9	62.5
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	63.2	51.5	53.0	63.9
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	61.6	50.0	51.4	62.3
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	60.3	50.1	52.2	61.3
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvd	58.7	48.4	50.6	59.6
25	Grant Line Road	State Route 99 to E. Stockton Blvd	70.2	58.5	60.0	70.8

Appendix D-1.15

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2013-169 Elk Grove *Housing* Development
Description: Cumulative - Current General Plan Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

			-------- Distances to Traffic Noise Contours --------				
Segment	Roadway Name	Segment Description	75	70	65	60	55
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	11	23	49	106	229
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	13	28	60	129	277
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	15	33	70	151	326
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	17	37	81	174	374
5	Bradshaw Road	Calvine Rd to Bond Rd	34	73	157	338	729
6	Bradshaw Road	Bond Rd to Grant Line Rd	14	31	67	144	311
7	Bruceville Road	Jacinto Rd to Sheldon Rd	8	18	39	84	181
8	Bruceville Road	Sheldon Rd to Laguna Blvd	16	35	76	164	354
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	15	32	69	149	322
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	13	27	58	125	270
11	Calvine Road	Power Inn Rd to Elk Grove- Florin Rd	18	38	81	175	378
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw Rd	9	20	42	91	197
13	Calvine Road	Bradshaw Rd to Grant Line Rd	12	26	56	120	259
14	Center Parkway	Sheldon Rd to Jacinto Rd	9	20	43	94	202
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	17	37	79	170	367
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	18	40	85	183	395
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	20	44	95	204	440
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	20	44	94	202	436
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Florin Rd	18	39	84	180	388
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman Rd	9	19	41	88	190
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	18	39	84	181	390
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	14	31	66	142	307
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	7	16	34	73	157
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvd	5	10	22	47	102
25	Grant Line Road	State Route 99 to E. Stockton Blvd	53	113	244	526	1133

Appendix D-1.16
FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
26	Grant Line Road	E. Stockton Blvd to Bradshaw R	36,850	83		17	1.0	0.5	55	100	-5
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkv	35,950	83		17	1.0	0.5	55	60	0
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	34,600	83		17	1.0	0.5	45	100	-5
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	30,700	83		17	1.0	0.5	45	100	-5
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	41,450	83		17	1.0	0.5	45	100	-5
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blv	56,450	83		17	1.0	0.5	45	100	0
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	47,200	83		17	1.0	0.5	45	100	-5
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Fl	36,500	83		17	1.0	0.5	45	70	-5
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw	21,100	83		17	5.0	10.0	45	100	0
35	State Route 99	Eschinger Rd to Grant Line Rd	56,650	83		17	5.0	10.0	65	220	0
36	State Route 99	Grant Line Rd to Elk Grove Blvd	57,100	83		17	5.0	10.0	65	140	-5
37	State Route 99	Elk Grove Blvd to Laguna Blvd	83,700	83		17	5.0	10.0	65	150	-5
38	State Route 99	Laguna Blvd to Sheldon Rd	93,250	83		17	5.0	10.0	65	200	-5
39	State Route 99	Sheldon Rd to Calvine Rd	98,950	83		17	2.0	5.0	65	140	-5
40	State Route 99	Calvine Rd to Stockton Blvd	109,450	83		17	2.0	5.0	65	170	0
41	Waterman Road	Calvine Rd to Vintage Park Rd	16,300	83		17	1.0	0.5	45	60	-5
42	Waterman Road	Calvine Rd to Bond Rd	16,350	83		17	1.0	0.5	55	60	-5
43	Waterman Road	Bond Road to Grant Line Rd	20,600	83		17	1.0	0.5	50	60	-5
44	Interste 5	Twin Cities to Hood Franklin	52,200	80		20	3.0	10.0	65	200	0
45	Interste 5	Hood Franklin to Elk Grove	54,850	80		20	3.0	10.0	65	250	-5
46	Interste 5	Elk Grove to Laguna	69,050	80		20	3.0	10.0	65	230	-5
47	Interste 5	Laguna to Pocket	89,250	80		20	3.0	10.0	65	210	-5

Appendix D-1.17

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
26	Grant Line Road	E. Stockton Blvd to Bradshaw Rd	65.0	52.2	53.1	65.5
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkwy	73.3	60.4	61.4	73.7
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	62.3	50.6	52.1	62.9
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	61.7	50.1	51.5	62.4
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	63.0	51.4	52.8	63.7
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blvd	69.4	57.7	59.2	70.0
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	63.6	51.9	53.4	64.3
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Florin Rd	64.8	53.1	54.6	65.5
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw Rd	64.5	60.4	67.9	70.0
35	State Route 99	Eschinger Rd to Grant Line Rd	68.2	62.1	68.5	71.9
36	State Route 99	Grant Line Rd to Elk Grove Blvd	66.2	60.0	66.5	69.9
37	State Route 99	Elk Grove Blvd to Laguna Blvd	67.4	61.2	67.7	71.1
38	State Route 99	Laguna Blvd to Sheldon Rd	66.0	59.8	66.3	69.7
39	State Route 99	Sheldon Rd to Calvine Rd	69.0	58.4	65.9	71.0
40	State Route 99	Calvine Rd to Stockton Blvd	73.2	62.6	70.1	75.1
41	Waterman Road	Calvine Rd to Vintage Park Rd	62.3	50.6	52.1	63.0
42	Waterman Road	Calvine Rd to Bond Rd	64.8	52.0	52.9	65.3
43	Waterman Road	Bond Road to Grant Line Rd	64.7	52.4	53.6	65.2
44	Interste 5	Twin Cities to Hood Franklin	69.0	60.5	69.3	72.4
45	Interste 5	Hood Franklin to Elk Grove	62.8	54.3	63.0	66.2
46	Interste 5	Elk Grove to Laguna	64.3	55.9	64.6	67.7
47	Interste 5	Laguna to Pocket	66.0	57.6	66.3	69.5

Appendix D-1.18

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

			-------- Distances to Traffic Noise Contours --------				
Segment	Roadway Name	Segment Description	75	70	65	60	55
26	Grant Line Road	E. Stockton Blvd to Bradshaw Rd	23	50	108	233	503
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkwy	49	107	230	495	1065
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	16	34	73	156	337
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	14	31	67	144	311
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	18	38	82	176	380
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blvd	47	101	217	467	1006
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	19	41	89	192	415
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Florin Rd	16	35	75	162	349
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw Rd	47	101	217	467	1006
35	State Route 99	Eschinger Rd to Grant Line Rd	136	293	632	1362	2934
36	State Route 99	Grant Line Rd to Elk Grove Blvd	64	137	295	635	1369
37	State Route 99	Elk Grove Blvd to Laguna Blvd	82	177	381	820	1767
38	State Route 99	Laguna Blvd to Sheldon Rd	88	190	409	881	1898
39	State Route 99	Sheldon Rd to Calvine Rd	75	162	350	754	1624
40	State Route 99	Calvine Rd to Stockton Blvd	174	374	806	1737	3743
41	Waterman Road	Calvine Rd to Vintage Park Rd	9	20	44	95	204
42	Waterman Road	Calvine Rd to Bond Rd	14	29	63	136	292
43	Waterman Road	Bond Road to Grant Line Rd	13	29	62	133	288
44	Interste 5	Twin Cities to Hood Franklin	135	291	627	1350	2909
45	Interste 5	Hood Franklin to Elk Grove	65	140	301	648	1396
46	Interste 5	Elk Grove to Laguna	76	163	351	755	1627
47	Interste 5	Laguna to Pocket	90	193	416	896	1931

Appendix D-19
FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan Plus Project - No Noise Control Measures
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	19,350	83		17	1.0	0.5	45	100	
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	25,800	83		17	1.0	0.5	45	100	
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	32,900	83		17	1.0	0.5	45	100	
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	23,650	83		17	1.0	0.5	55	100	
5	Bradshaw Road	Calvine Rd to Bond Rd	20,350	83		17	1.0	0.5	55	150	
6	Bradshaw Road	Bond Rd to Grant Line Rd	17,900	83		17	1.0	0.5	55	100	
7	Bruceville Road	Jacinto Rd to Sheldon Rd	18,500	83		17	1.0	0.5	40	100	
8	Bruceville Road	Sheldon Rd to Laguna Blvd	37,200	83		17	1.0	0.5	45	100	
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	32,300	83		17	1.0	0.5	45	100	
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	24,850	83		17	1.0	0.5	45	100	
11	Calvine Road	Power Inn Rd to Elk Grove- Florin	41,050	83		17	1.0	0.5	45	100	
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw I	15,450	83		17	1.0	0.5	45	100	
13	Calvine Road	Bradshaw Rd to Grant Line Rd	13,600	83		17	1.0	0.5	55	100	
14	Center Parkway	Sheldon Rd to Jacinto Rd	21,800	83		17	1.0	0.5	40	100	
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	39,300	83		17	1.0	0.5	45	100	
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	33,200	83		17	1.0	0.5	50	100	
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	39,050	83		17	1.0	0.5	50	100	
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	38,400	83		17	1.0	0.5	50	150	
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Flor	25,950	83		17	1.0	0.5	35	75	
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman	18,650	83		17	1.0	0.5	25	60	
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	43,050	83		17	1.0	0.5	45	100	
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	30,050	83		17	1.0	0.5	45	100	
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	21,100	83		17	1.0	0.5	35	60	
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvc	11,000	83		17	1.0	0.5	35	50	
25	Grant Line Road	State Route 99 to E. Stockton Blvc	67,450	83		17	1.0	0.5	45	100	

Appendix D-20

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan Plus Project - No Noise Control Measures
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	64.7	53.0	54.5	65.4
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	66.0	54.3	55.8	66.6
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	67.0	55.4	56.8	67.7
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	68.1	55.3	56.2	68.6
5	Bradshaw Road	Calvine Rd to Bond Rd	64.8	52.0	52.9	65.3
6	Bradshaw Road	Bond Rd to Grant Line Rd	66.9	54.1	55.0	67.4
7	Bruceville Road	Jacinto Rd to Sheldon Rd	63.1	52.1	53.9	63.9
8	Bruceville Road	Sheldon Rd to Laguna Blvd	67.6	55.9	57.4	68.2
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	67.0	55.3	56.8	67.6
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	65.8	54.1	55.6	66.5
11	Calvine Road	Power Inn Rd to Elk Grove- Florin Rd	68.0	56.3	57.8	68.7
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw Rd	63.8	52.1	53.6	64.4
13	Calvine Road	Bradshaw Rd to Grant Line Rd	65.7	52.9	53.8	66.2
14	Center Parkway	Sheldon Rd to Jacinto Rd	63.8	52.8	54.6	64.6
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	67.8	56.1	57.6	68.5
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	68.4	56.1	57.3	69.0
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	69.1	56.8	58.0	69.7
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	66.4	54.1	55.3	66.9
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Florin Rd	64.7	54.5	56.7	65.7
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman Rd	60.5	52.2	56.9	62.5
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	68.2	56.5	58.0	68.9
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	66.6	55.0	56.4	67.3
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	65.3	55.1	57.2	66.3
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvd	63.7	53.4	55.6	64.6
25	Grant Line Road	State Route 99 to E. Stockton Blvd	70.2	58.5	60.0	70.8

Appendix D-21

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2013-169 Elk Grove Housing Development

Description: Cumulative - Current General Plan Plus Project - No Noise Control Measures

Ldn/CNEL: Ldn

Hard/Soft: Soft

			-------- Distances to Traffic Noise Contours --------				
Segment	Roadway Name	Segment Description	75	70	65	60	55
1	Big Horn Boulevard	Franklin Blvd to Laguna Blvd	23	49	106	229	493
2	Big Horn Boulevard	Laguna Blvd to Elk Grove Blvd	28	60	129	277	597
3	Big Horn Boulevard	Elk Grove Blvd to Kammerer Rd	33	70	151	326	702
4	Bradshaw Road	Vintage Park Rd to Calvine Rd	37	81	174	374	806
5	Bradshaw Road	Calvine Rd to Bond Rd	34	73	157	338	729
6	Bradshaw Road	Bond Rd to Grant Line Rd	31	67	144	311	669
7	Bruceville Road	Jacinto Rd to Sheldon Rd	18	39	84	181	389
8	Bruceville Road	Sheldon Rd to Laguna Blvd	35	76	164	354	762
9	Bruceville Road	Laguna Blvd to Elk Grove Blvd	32	69	149	322	694
10	Bruceville Road	Elk Grove Blvd to Bilby Rd	27	58	125	270	582
11	Calvine Road	Power Inn Rd to Elk Grove- Florin Rd	38	81	175	378	814
12	Calvine Road	Elk Grove-Florin Rd to Bradshaw Rd	20	42	91	197	424
13	Calvine Road	Bradshaw Rd to Grant Line Rd	26	56	120	259	557
14	Center Parkway	Sheldon Rd to Jacinto Rd	20	43	94	202	434
15	Elk Grove Boulevard	Interstate 5 to Franklin Rd	37	79	170	367	790
16	Elk Grove Boulevard	Franklin Blve to Bruceville Rd	40	85	183	395	852
17	Elk Grove Boulevard	Bruceville Rd to Bigh Horn Blvd	44	95	204	440	949
18	Elk Grove Boulevard	Big Horn Blvd to E. Stockton Blvd	44	94	202	436	938
19	Elk Grove Boulevard	E. Stockton Blvd to Elk Grove-Florin Rd	18	39	84	180	388
20	Elk Grove Boulevard	Elk Grove-Florin Rd to Waterman Rd	9	19	41	88	190
21	Elk-Grove Florin Road	Vintage Park Rd to Calvine Rd	39	84	181	390	840
22	Elk Grove-Florin Road	Calvine Rd to Bond Rd	31	66	142	307	661
23	Elk Grove-Florin Road	Bond RD to Elk Grove-Florin Rd	16	34	73	157	338
24	Elk Grove-Florin Road	Elk Grove Blvd to E. Stockton Blvd	10	22	47	102	219
25	Grant Line Road	State Route 99 to E. Stockton Blvd	53	113	244	526	1133

Appendix D-22
FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan Plus Project - No Noise Control Measures
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
26	Grant Line Road	E. Stockton Blvd to Bradshaw R	36,850	83		17	1.0	0.5	55	100	
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkv	35,950	83		17	1.0	0.5	55	60	
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	34,600	83		17	1.0	0.5	45	100	
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	30,700	83		17	1.0	0.5	45	100	
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	41,450	83		17	1.0	0.5	45	100	
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blv	56,450	83		17	1.0	0.5	45	100	
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	47,200	83		17	1.0	0.5	45	100	
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Fl	36,500	83		17	1.0	0.5	45	70	
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw	21,100	83		17	5.0	10.0	45	100	
35	State Route 99	Eschinger Rd to Grant Line Rd	56,650	83		17	5.0	10.0	65	220	
36	State Route 99	Grant Line Rd to Elk Grove Blvd	57,100	83		17	5.0	10.0	65	140	
37	State Route 99	Elk Grove Blvd to Laguna Blvd	83,700	83		17	5.0	10.0	65	150	
38	State Route 99	Laguna Blvd to Sheldon Rd	93,250	83		17	5.0	10.0	65	200	
39	State Route 99	Sheldon Rd to Calvine Rd	98,950	83		17	2.0	5.0	65	140	
40	State Route 99	Calvine Rd to Stockton Blvd	109,450	83		17	2.0	5.0	65	170	
41	Waterman Road	Calvine Rd to Vintage Park Rd	16,300	83		17	1.0	0.5	45	60	
42	Waterman Road	Calvine Rd to Bond Rd	16,350	83		17	1.0	0.5	55	60	
43	Waterman Road	Bond Road to Grant Line Rd	20,600	83		17	1.0	0.5	50	60	
44	Interste 5	Twin Cities to Hood Franklin	52,200	80		20	3.0	10.0	65	200	
45	Interste 5	Hood Franklin to Elk Grove	54,850	80		20	3.0	10.0	65	250	
46	Interste 5	Elk Grove to Laguna	69,050	80		20	3.0	10.0	65	230	
47	Interste 5	Laguna to Pocket	89,250	80		20	3.0	10.0	65	210	

Appendix D-23

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2013-169 Elk Grove Housing Development
Description: Cumulative - Current General Plan Plus Project - No Noise Control Measures
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
26	Grant Line Road	E. Stockton Blvd to Bradshaw Rd	70.0	57.2	58.1	70.5
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkwy	73.3	60.4	61.4	73.7
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	67.3	55.6	57.1	67.9
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	66.7	55.1	56.5	67.4
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	68.0	56.4	57.8	68.7
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blvd	69.4	57.7	59.2	70.0
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	68.6	56.9	58.4	69.3
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Florin Rd	69.8	58.1	59.6	70.5
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw Rd	64.5	60.4	67.9	70.0
35	State Route 99	Eschinger Rd to Grant Line Rd	68.2	62.1	68.5	71.9
36	State Route 99	Grant Line Rd to Elk Grove Blvd	71.2	65.0	71.5	74.9
37	State Route 99	Elk Grove Blvd to Laguna Blvd	72.4	66.2	72.7	76.1
38	State Route 99	Laguna Blvd to Sheldon Rd	71.0	64.8	71.3	74.7
39	State Route 99	Sheldon Rd to Calvine Rd	74.0	63.4	70.9	76.0
40	State Route 99	Calvine Rd to Stockton Blvd	73.2	62.6	70.1	75.1
41	Waterman Road	Calvine Rd to Vintage Park Rd	67.3	55.6	57.1	68.0
42	Waterman Road	Calvine Rd to Bond Rd	69.8	57.0	57.9	70.3
43	Waterman Road	Bond Road to Grant Line Rd	69.7	57.4	58.6	70.2
44	Interste 5	Twin Cities to Hood Franklin	69.0	60.5	69.3	72.4
45	Interste 5	Hood Franklin to Elk Grove	67.8	59.3	68.0	71.2
46	Interste 5	Elk Grove to Laguna	69.3	60.9	69.6	72.7
47	Interste 5	Laguna to Pocket	71.0	62.6	71.3	74.5

Appendix D-24

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2013-169 Elk Grove Housing Development

Description: Cumulative - Current General Plan Plus Project - No Noise Control Measures

Ldn/CNEL: Ldn

Hard/Soft: Soft

			-------- Distances to Traffic Noise Contours --------				
Segment	Roadway Name	Segment Description	75	70	65	60	55
26	Grant Line Road	E. Stockton Blvd to Bradshaw Rd	50	108	233	503	1083
27	Kammerer Road	Big Horn Blvd to Lent Ranch Pkwy	49	107	230	495	1065
28	Laguna Boulevard	Interstate 5 to Franklin Blvd	34	73	156	337	726
29	Laguna Boulevard	Franklin Blvd to Bruceville Rd	31	67	144	311	670
30	Laguna Boulevard	Bruceville Rd to Big Horn Blvd	38	82	176	380	819
31	Laguna Boulevard	Big Horn Blvd to E. Stockton Blvd	47	101	217	467	1006
32	Sheldon Road	Center Pkwy to E. Stockton Blvd	41	89	192	415	893
33	Sheldon Road	E. Stockton Blvd to Elk Grove-Florin Rd	35	75	162	349	752
34	Sheldon Road	Elk Grove-Florin Rd to Bradshaw Rd	47	101	217	467	1006
35	State Route 99	Eschinger Rd to Grant Line Rd	136	293	632	1362	2934
36	State Route 99	Grant Line Rd to Elk Grove Blvd	137	295	635	1369	2949
37	State Route 99	Elk Grove Blvd to Laguna Blvd	177	381	820	1767	3806
38	State Route 99	Laguna Blvd to Sheldon Rd	190	409	881	1898	4090
39	State Route 99	Sheldon Rd to Calvine Rd	162	350	754	1624	3499
40	State Route 99	Calvine Rd to Stockton Blvd	174	374	806	1737	3743
41	Waterman Road	Calvine Rd to Vintage Park Rd	20	44	95	204	440
42	Waterman Road	Calvine Rd to Bond Rd	29	63	136	292	630
43	Waterman Road	Bond Road to Grant Line Rd	29	62	133	288	619
44	Interste 5	Twin Cities to Hood Franklin	135	291	627	1350	2909
45	Interste 5	Hood Franklin to Elk Grove	140	301	648	1396	3007
46	Interste 5	Elk Grove to Laguna	163	351	755	1627	3506
47	Interste 5	Laguna to Pocket	193	416	896	1931	4160

Appendix D-2.1
Elk Grove Housing Element Update EIR
24hr Continuous Noise Monitoring - Site LT-1
Wednesday October 9 - Thursday October 10, 2013

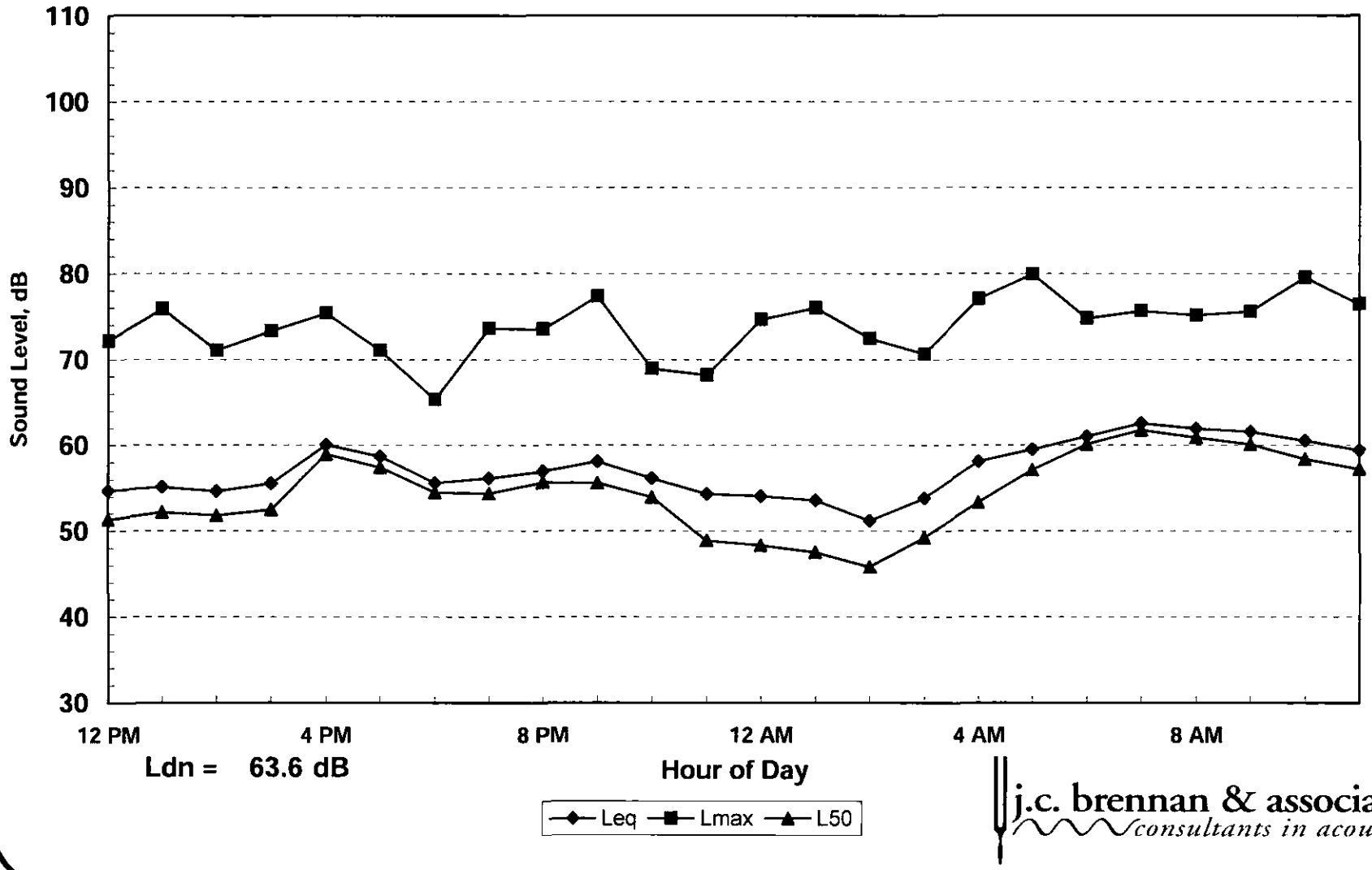
Hour	Leq	Lmax	L50	L90
12:00	55	72	51	46
13:00	55	76	52	46
14:00	55	71	52	47
15:00	56	73	53	48
16:00	60	75	59	55
17:00	59	71	57	52
18:00	56	65	55	51
19:00	56	74	54	51
20:00	57	74	56	50
21:00	58	77	56	49
22:00	56	69	54	49
23:00	54	68	49	45
0:00	54	75	48	44
1:00	54	76	48	43
2:00	51	72	46	43
3:00	54	71	49	45
4:00	58	77	53	47
5:00	60	80	57	51
6:00	61	75	60	55
7:00	63	76	62	57
8:00	62	75	61	57
9:00	62	76	60	55
10:00	61	80	58	53
11:00	60	76	57	51

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	62.6	54.6	59.0	61.0	51.2	56.9
Lmax (Maximum)	79.6	65.3	74.1	79.9	68.2	73.6
L50 (Median)	61.8	51.4	56.2	60.2	45.8	51.6
L90 (Background)	57.0	45.6	51.1	55.1	42.7	46.9

Computed Ldn, dB	63.6
% Daytime Energy	73%
% Nighttime Energy	27%

j.c. brennan & associates
consultants in acoustics

Appendix D-2.1
Elk Grove Housing Element Update EIR
24hr Continuous Noise Monitoring - Site LT-1
Wednesday October 9 - Thursday October 10, 2013



Ldn = 63.6 dB

j.c. brennan & associates
consultants in acoustics

Appendix D-2.2
Elk Grove Housing Element Update EIR
24hr Continuous Noise Monitoring - Site LT-2
Wednesday October 9 - Thursday October 10, 2013

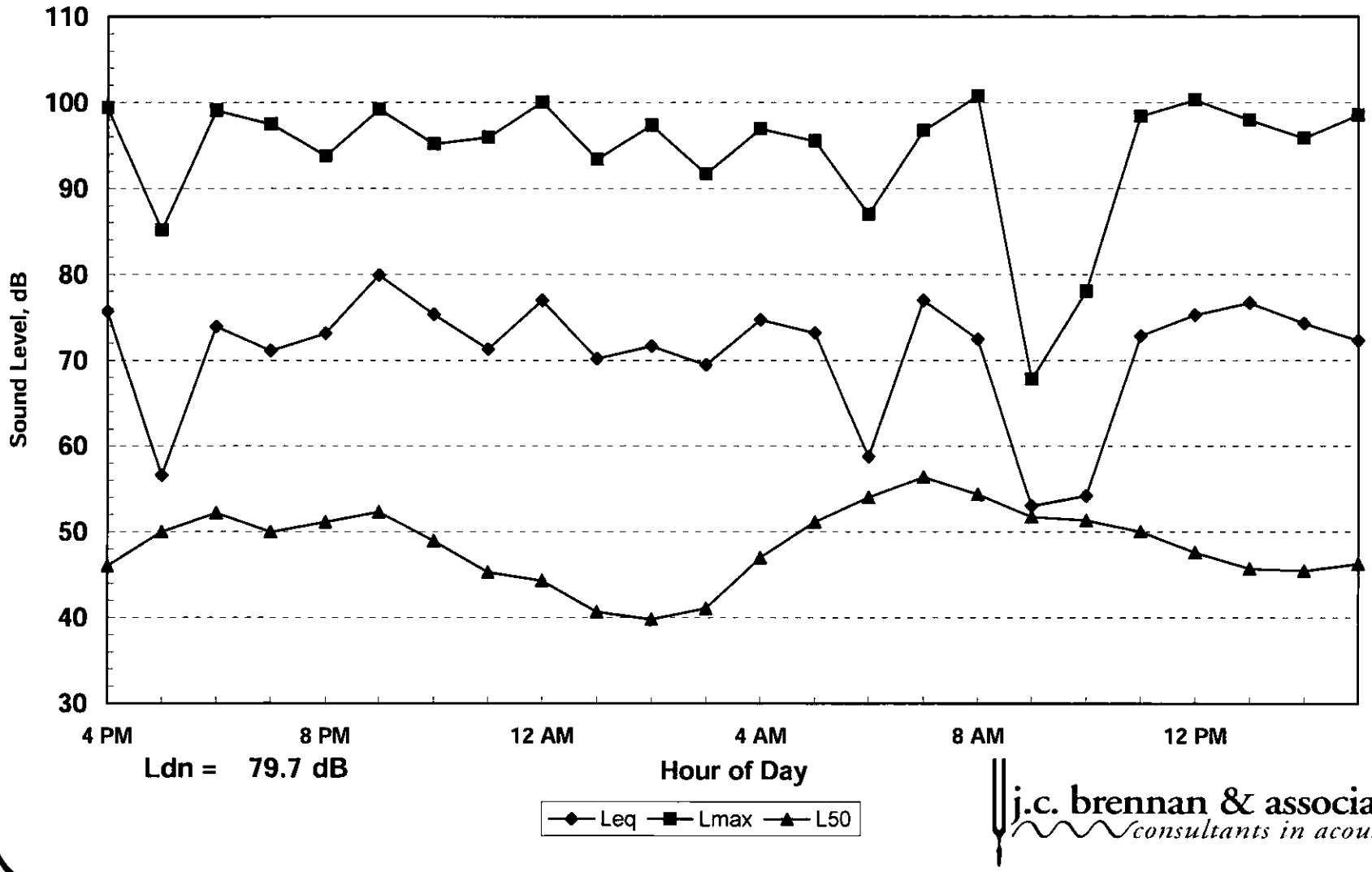
Hour	Leq	Lmax	L50	L90
16:00	76	99	46	40
17:00	57	85	50	46
18:00	74	99	52	48
19:00	71	98	50	46
20:00	73	94	51	46
21:00	80	99	52	47
22:00	75	95	49	44
23:00	71	96	45	39
0:00	77	100	44	38
1:00	70	93	41	38
2:00	72	97	40	37
3:00	69	92	41	38
4:00	75	97	47	41
5:00	73	96	51	46
6:00	59	87	54	50
7:00	77	97	56	52
8:00	72	101	54	50
9:00	53	68	52	47
10:00	54	78	51	48
11:00	73	98	50	45
12:00	75	100	48	44
13:00	77	98	46	42
14:00	74	96	45	42
15:00	72	99	46	42

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	79.9	53.1	74.3	77.0	58.8	73.1
Lmax (Maximum)	100.8	67.8	93.9	100.1	87.0	94.8
L50 (Median)	56.5	45.5	50.1	54.1	39.8	45.8
L90 (Background)	52.2	40.5	45.9	49.8	36.8	41.2

Computed Ldn, dB	79.7
% Daytime Energy	69%
% Nighttime Energy	31%

j.c. brennan & associates
consultants in acoustics

Appendix D-2.2
Elk Grove Housing Element Update EIR
24hr Continuous Noise Monitoring - Site LT-2
Wednesday October 9 - Thursday October 10, 2013



Ldn = 79.7 dB

j.c. brennan & associates
consultants in acoustics

Appendix D-2.3
Elk Grove Housing Element Update EIR
24hr Continuous Noise Monitoring - Site LT-3
Wednesday October 9 - Thursday October 10, 2013

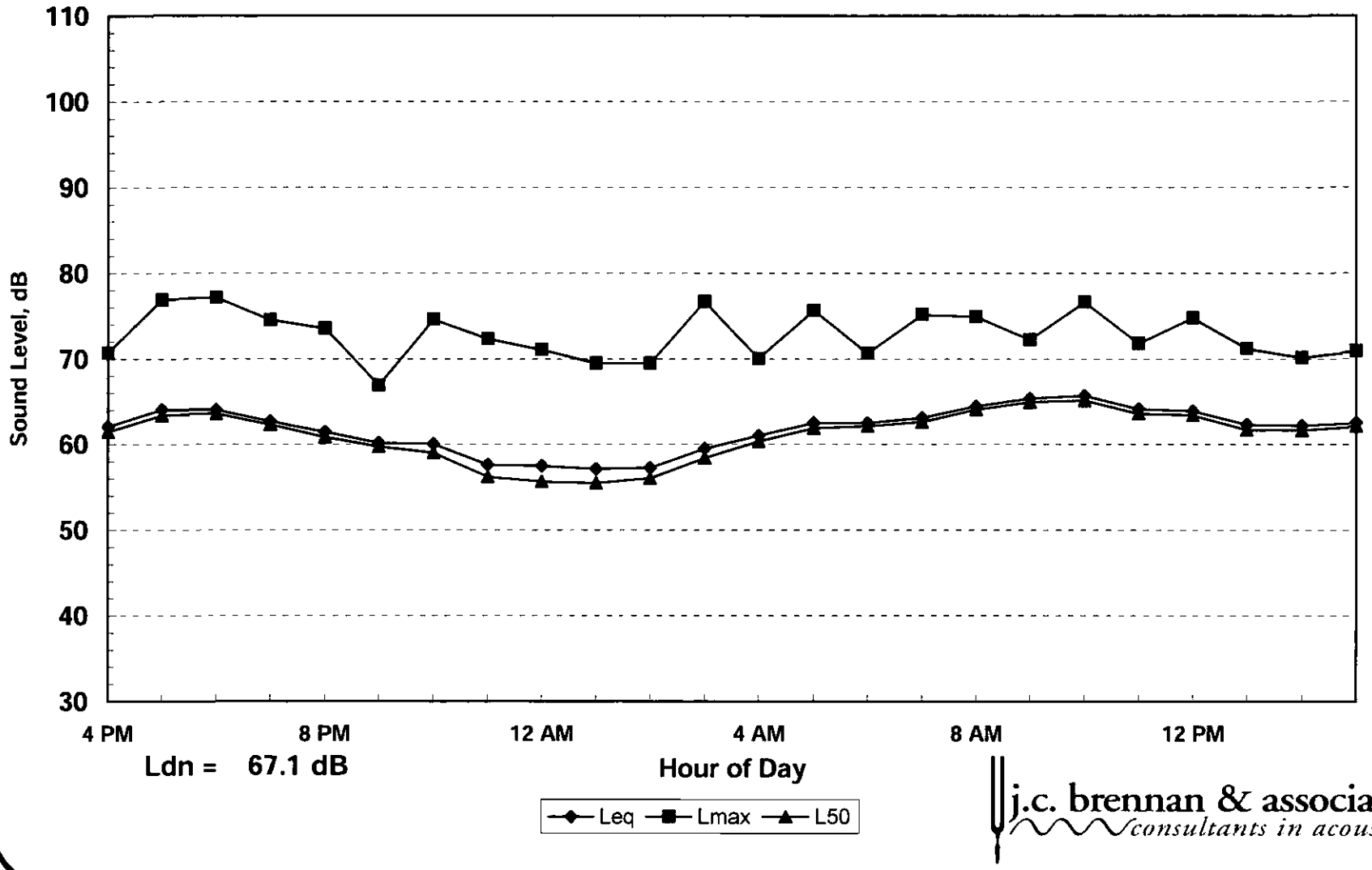
Hour	Leq	Lmax	L50	L90
16:00	62	71	61	58
17:00	64	77	63	62
18:00	64	77	64	61
19:00	63	75	62	60
20:00	61	74	61	58
21:00	60	67	60	57
22:00	60	75	59	56
23:00	58	72	56	52
0:00	58	71	56	51
1:00	57	70	55	51
2:00	57	69	56	52
3:00	60	77	58	54
4:00	61	70	60	57
5:00	63	76	62	59
6:00	63	71	62	60
7:00	63	75	63	60
8:00	64	75	64	62
9:00	65	72	65	63
10:00	66	77	65	63
11:00	64	72	64	61
12:00	64	75	63	61
13:00	62	71	62	59
14:00	62	70	62	58
15:00	63	71	62	60

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	65.7	60.2	63.5	62.5	57.2	60.0
Lmax (Maximum)	77.2	66.9	73.2	76.7	69.5	72.2
L50 (Median)	65.1	59.8	62.7	62.1	55.5	58.4
L90 (Background)	62.8	57.2	60.3	60.1	50.7	54.8

Computed Ldn, dB	67.1
% Daytime Energy	79%
% Nighttime Energy	21%

j.c. brennan & associates
consultants in acoustics

Appendix D-2.3
Elk Grove Housing Element Update EIR
24hr Continuous Noise Monitoring - Site LT-3
Wednesday October 9 - Thursday October 10, 2013



Ldn = 67.1 dB

j.c. brennan & associates
consultants in acoustics

Appendix D-2.4
Elk Grove Housing Element Update EIR
24hr Continuous Noise Monitoring - Site LT-4
Wednesday October 9 - Thursday October 10, 2013

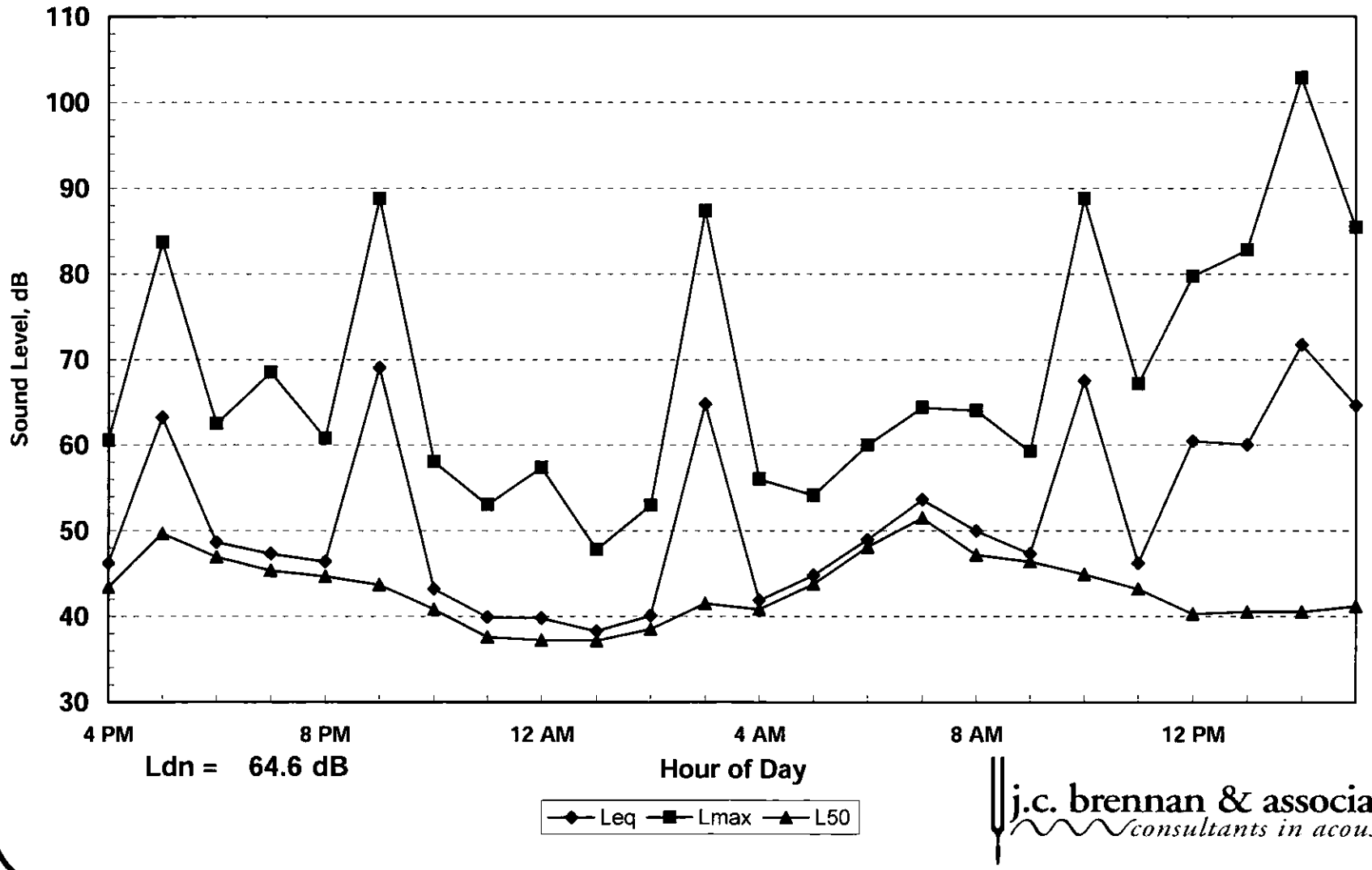
Hour	Leq	Lmax	L50	L90
16:00	46	61	43	39
17:00	63	84	50	47
18:00	49	63	47	44
19:00	47	68	45	43
20:00	46	61	45	42
21:00	69	89	44	40
22:00	43	58	41	38
23:00	40	53	38	35
0:00	40	57	37	34
1:00	38	48	37	34
2:00	40	53	39	36
3:00	65	87	42	39
4:00	42	56	41	39
5:00	45	54	44	41
6:00	49	60	48	45
7:00	54	64	52	48
8:00	50	64	47	45
9:00	47	59	46	44
10:00	68	89	45	41
11:00	46	67	43	40
12:00	61	80	40	37
13:00	60	83	41	37
14:00	72	103	41	37
15:00	65	85	41	38

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	71.7	46.2	63.9	64.8	38.3	55.5
Lmax (Maximum)	102.8	59.3	74.6	87.3	47.8	58.6
L50 (Median)	51.6	40.3	44.7	48.1	37.2	40.6
L90 (Background)	48.4	36.8	41.4	45.5	33.8	37.8

Computed Ldn, dB	64.6
% Daytime Energy	92%
% Nighttime Energy	8%

j.c. brennan & associates
consultants in acoustics

Appendix D-2.4
Elk Grove Housing Element Update EIR
24hr Continuous Noise Monitoring - Site LT-4
Wednesday October 9 - Thursday October 10, 2013



Ldn = 64.6 dB

j.c. brennan & associates
consultants in acoustics

FINAL
ENVIRONMENTAL IMPACT REPORT

FOR

ELK GROVE
HOUSING ELEMENT UPDATE

SCH# 2013082012

JANUARY 2014

Prepared for:

City of Elk Grove
Attn: Sarah Bontrager
8401 Laguna Palms Way
Elk Grove, CA 95758

Prepared by:

De Novo Planning Group
2778 17th Street
Sacramento, CA 95818
www.denovoplanning.com

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

FINAL
ENVIRONMENTAL IMPACT REPORT

FOR

ELK GROVE
HOUSING ELEMENT UPDATE

SCH# 2013082012

JANUARY 2014

Prepared for:

City of Elk Grove
Attn: Sarah Bontrager
8401 Laguna Palms Way
Elk Grove, CA 95758

Prepared by:

De Novo Planning Group
2778 17th Street
Sacramento, CA 95818
www.denovoplanning.com

Chapters **Page Numbers**

This page left intentionally blank.

The City of Elk Grove (City) is the lead agency responsible for the environmental review of the proposed Housing Element Update (Project) evaluated herein. The California Environmental Quality Act (CEQA) requires the preparation of an Environmental Impact Report (EIR) prior to the approval of any project that may have a significant impact on the environment

1.1 PURPOSE AND INTENDED USES OF THE EIR

CEQA REQUIREMENTS FOR A FINAL EIR

This Final EIR (Final EIR) for the Project has been prepared in accordance with CEQA and the State CEQA Guidelines. State CEQA Guidelines Section 15132 requires that a Final EIR consist of the following:

- the Draft Environmental Impact Report (Draft EIR) or a revision of the draft;
- comments and recommendations received on the Draft EIR, either verbatim or in summary;
- a list of persons, organizations, and public agencies commenting on the Draft EIR;
- the responses of the lead agency to significant environmental concerns raised in the review and consultation process; and
- any other information added by the lead agency.

In accordance with State CEQA Guidelines Section 15132(a), the Housing Element Update Draft EIR (September 2013) is incorporated by reference into this Final EIR.

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed development, and an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

PURPOSE AND USE

The City, as the lead agency, has prepared this Final EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from adoption and the subsequent implementation of the proposed project.

The environmental review process enables interested parties to evaluate the proposed project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

This EIR will be used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the Project. Subsequent actions that may be associated with the Project are identified in Chapter 2.0, Project Description, of the Draft EIR.

1.2 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR involves the following general procedural steps:

NOTICE OF PREPARATION

The City circulated a NOP of an EIR for the Housing Element on August 2, 2013 to the State Clearinghouse, public agencies, organizations, and the public. A public scoping meeting was held on August 15, 2013 to provide an overview of the Project and to receive comments from interested agencies, organizations, and members of the public regarding the scope of the environmental analysis to be included in the Draft EIR. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and comments provided by interested parties in response to the NOP are presented in Appendix A.

NOTICE OF AVAILABILITY AND DRAFT EIR

The City provided the State Clearinghouse with the Notice of Completion (NOC) and Draft EIR for review on December 16, 2013. The City published a public notice of availability (NOA) for the Draft EIR on December 13, 2013, inviting comment from the general public, trustee agencies, responsible agencies, organizations, and other interested parties. The Draft EIR was available for review from December 16, 2013 through January 30, 2014. The City's Planning Commission received comments on the Draft EIR at its meeting on January 9, 2014.

The Draft EIR contains a description of the Project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in the Draft EIR.

RESPONSE TO COMMENTS/FINAL EIR

The City received 11 comment letters regarding the Draft EIR. In accordance with CEQA Guidelines Section 15088, this Final EIR responds to the written comments received as required by CEQA. The Final EIR also contains minor edits to the Draft EIR, which are included in Section 3.0, Revisions to the Draft EIR. This document and the Draft EIR, as amended herein, constitute the Final EIR.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete", the City Council may certify the Final EIR in accordance with CEQA. Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or reject the

Project. A decision to approve the Project, for which this EIR identifies significant environmental effects, must be accompanied by written findings in accordance with State CEQA Guidelines Sections 15091 and 15093. A Mitigation Monitoring Program would also be adopted in accordance with Public Resources Code Section 21081.6(a) and State CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. This Mitigation Monitoring Program will be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the EIR.

1.3 ORGANIZATION OF THE FINAL EIR

This Final EIR has been prepared consistently with Section 15132 of the State CEQA Guidelines, which identifies the content requirements for Final EIRs. This Final EIR is organized in the following manner:

CHAPTER 1.0 – INTRODUCTION

Chapter 1 briefly describes the purpose of the environmental evaluation, identifies the lead, agency, summarizes the process associated with preparation and certification of an EIR, and identifies the content requirements and organization of the Final EIR.

CHAPTER 2.0 – COMMENTS ON THE DRAFT EIR AND RESPONSES

Chapter 2 provides a list of commentors, copies of written comments made on the Draft EIR (coded for reference), and responses to those written comments.

CHAPTER 3.0 – REVISIONS TO THE DRAFT EIR

Chapter 3.0 consists of minor revisions to the Draft EIR. The revisions to the Draft EIR do not provide any significant new information nor do any of the revisions result in substantive changes to the Draft EIR.

This page left intentionally blank.

2.1 INTRODUCTION

No new significant environmental impacts or issues, beyond those already covered in the Draft Environmental Impact Report (Draft EIR) for the Project, were raised during the comment period. The City, as lead agency, directed that responses to the Draft EIR comments be prepared. Responses to comments received during the comment period do not involve any new significant impacts or "significant new information" that would require recirculation of the Draft EIR pursuant to CEQA Guidelines Section 15088.5.

2.2 LIST OF COMMENTORS

Table 2-1 lists the comments on the Draft EIR that were submitted to the City. The assigned comment letter number, letter date, letter author, and affiliation, if presented in the comment letter or if representing a public agency, are also listed.

TABLE 2-1: LIST OF COMMENTORS

RESPONSE LETTER/ NUMBER	INDIVIDUAL OR SIGNATORY	AFFILIATION	DATE
A	Trevor Cleak	Central Valley Regional Water Quality Control Board	January 24, 2014
B	Jay S. Punia	Central Valley Flood Protection Board	January 21, 2014
C	Kim Williams	Elk Grove Unified School District	January 29, 2014
1	David P. Messing	Hydrox Properties XII, LLC	December 19, 2013
2	--	Resident	January 8, 2014
3	Randy Singh	Resident	January 8, 2014
4	Mark F. Buckman, Esq.	Resident	January 10, 2014
5	Shihwen Chang	Resident	January 28, 2014
6	John Tuttle	Resident	January 28, 2014
7	Mark F. Buckman	Resident	January 29, 2014
8	Laikun Wong	Resident	January 30, 2014

2.3 COMMENTS AND RESPONSES

REQUIREMENTS FOR RESPONDING TO COMMENTS ON A DRAFT EIR

CEQA Guidelines Section 15088 requires that the City, as lead agency, evaluate and respond to all comments on the Draft EIR that regard an environmental issue. The written response must address the significant environmental issue raised and provide a detailed response, especially when specific comments or suggestions (e.g., additional mitigation measures) are not accepted. In addition, the written response must be a good faith and reasoned analysis. However, lead agencies need only respond to significant environmental issues associated with the Project and do not need to provide all the information requested by the commentor, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Section 15204(a)).

CEQA Guidelines Section 15204 recommends that commentors provide detailed comments that focus on the sufficiency of the Draft EIR in identifying and analyzing the possible environmental impacts of the Project and ways to avoid or mitigate the significant effects of the Project, and that commentors provide evidence supporting their comments. Pursuant to CEQA Guidelines Section 15064, an effect shall not be considered significant in the absence of substantial evidence.

CEQA Guidelines Section 15088 also recommends that revisions to the Draft EIR be noted as a revision in the Draft EIR or as a separate section of the Final EIR. Chapter 3.0 of this Final EIR identifies all revisions to the Draft EIR.

RESPONSES TO COMMENT LETTERS

Written comments on the Draft EIR are reproduced on the following pages, along with responses to those comments. To assist in referencing comments and responses, the following coding system is used:

- Each letter is lettered (i.e., Letter A) and each comment within each letter is numbered (i.e., comment A-1, comment A-2).

LETTER A

Water Boards

Central Valley Regional Water Quality Control Board

24 January 2014

Sarah Bontrager
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

CERTIFIED MAIL
7013 1710 0002 3644 0496

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, HOUSING ELEMENT UPDATE PROJECT, SCH NO. 2013082012, SACRAMENTO COUNTY

Pursuant to the State Clearinghouse's 16 December 2013 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Environmental Impact Report* for the Housing Element Update Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). A-1

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

Karl E. Longley ScD, P.E., chair | Pamela C. Creedon P.E., BCEE, executive officer
1020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml A-1

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 97-03-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Clean Water Act Section 401 Permit – Water Quality Certification
If an USACOE permit, or any other federal permit, is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

Waste Discharge Requirements
If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project will require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

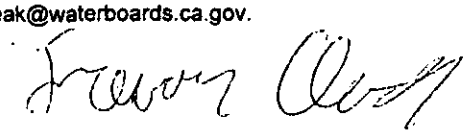
A-1

Low or Limited Threat General NPDES Permit
If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Low Threat General Order) or the General Order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water* (Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073.pdf

If you have questions regarding these comments, please contact me at (916) 464-4684 or tcleak@waterboards.ca.gov. A-1



Trevor Cleak
Environmental Scientist

cc: State Clearinghouse Unit, Governor's Office of Planning and Research, Sacramento

Letter A Trevor Cleak, Central Valley Regional Water Quality Control Board (CVRWQCB)

Response A-1: The commentor indicates that the CVRWQCB has reviewed the request for review for the EIR for the Project. The commentor states that the CVRWQCB is delegated with the responsibility of protecting the quality of the surface and groundwaters of the state and that their comments will address concerns surrounding those issues. The commentor then describes requirements related to the Construction Storm Water General Permit, Phase I and II Municipal Separate Storm Sewer System Permits, Industrial Storm Water General Permit, Clean Water Act Section 404 Permit, Clean Water Action Section 401 Permit, Waste Discharge Requirements, and Low or Limited Threat General NPDES Permit. The Draft EIR addresses water quality in Section 3.6, Hydrology and Water Quality. The Project does not include entitlements for subsequent development projects on the candidate sites. Future projects on the candidate sites will be required to obtain all necessary permits, including any of the applicable water quality permits identified by the commentor. The description provided by the commentor for each permit is informational and does not address the content nor the adequacy of the Draft EIR. The comment is noted.

LETTER B

STATE OF CALIFORNIA – THE NATURAL RESOURCES AGENCY EDMUND G. BROWN, JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-2380 FAX: (916) 574-0682

January 21, 2014

Ms. Sarah Bontrager, Housing Program Manager
City of Elk Grove Planning Department
8401 Laguna Palms Way
Elk Grove, California 95758

Subject: City of Elk Grove 2013-2021 Draft Housing Element Review

Dear Ms. Bontrager:

The Central Valley Flood Protection Board (CVFPB) staff has reviewed the documentation supplied from the State Clearing House for the City of Elk Grove 2013-2021 Draft Housing Element Review, and the 2013-2021 Draft Housing Element from the City's website. Upon completion of our review, CVFPB staff has the following flood hazard concerns: B-1

- CVFPB staff found the City of Elk Grove lies within the 100-year, 200-year and 500-year floodplains for this area of California (please see Attachment A). It is because of the flood hazard risk for this area that the CVFPB staff suggests the City consider following current State flood management policy noted in Government Code Sections 65865.5, 65962 and 66474.5 which discourages residential development within floodplains unless there is an adequate flood protective system present. B-2

- CVFPB staff suggests the City become involved with the Regional Flood Management Planning effort for the Lower Sacramento River/Delta North Planning Region, which is currently underway as part of the Central Valley Flood Protection Plan (CVFPP). Attachment B shows the draft Regional Flood Management Planning Regions throughout California. The local CVFPP planning region contacts are: B-3

    - For the Lower Sacramento River/Delta North Region, the local lead agency is the West Sacramento Area Flood Control Agency (WSAFCA), located at the City of West Sacramento, Civic Center, Second Floor, 1110 West Capitol Avenue, West Sacramento, CA, 95691. The point of contact (POC) is Mr. Greg Fabun, Flood Protection Manager. He can be reached at (916) 617-4855, or at gregf@cityofwestsacramento.org.

- The road embankments of Interstate 5 and State Route 99 may act as barriers to a flood evacuation, as well as impede flood waters. In a flooding event, emergency services may be isolated from certain areas of the City due to these roadway barriers and their retained flood waters. The City will need to address these issues in the 2013-2021 Draft Housing Element. B-4

To summarize, AB 162 requires cities and counties in the Central Valley to amend the land use, conservation, safety, and housing elements of their general plans to address flood-related matters. In addition to cities and counties providing adequate flood management in their planning, these legislative requirements also make flood risks more apparent to the public when deciding whether to live in a floodplain and face preparedness for flooding, purchase of flood insurance, and other associated consequences.

The California Department of Water Resources (DWR), in October 2010, prepared the "*Implementing* State Flood Risk Management Legislation into Local Land Use Planning, A Handbook for Local Communities." *CVFPB staff* suggests the City follow this handbook for evaluating the flood hazard risks of future development proposals. This handbook *is available* at the following DWR internet address: B-5
http://www.water.ca.gov/floodmgmt/lrafmo/fmb/docs/Oct2010_DWR_Handbook_web.pdf

A general plan checklist is attached (Appendix C from the Handbook) to assist you in preparing the required information and to use when submitting future general plan documents to the CVFPB for review. Please provide this checklist to the staff or consultants who prepare general plan updates for your jurisdiction. The checklist outlines what is required by the law, however, CVFPB staff may ask for more information in addition to this checklist.

If you have any further questions, please contact Mr. Michael C. Wright, Chief of the Enforcement Section, at (916) 574-0698, or by e-mail at Michael.Wright@water.ca.gov.

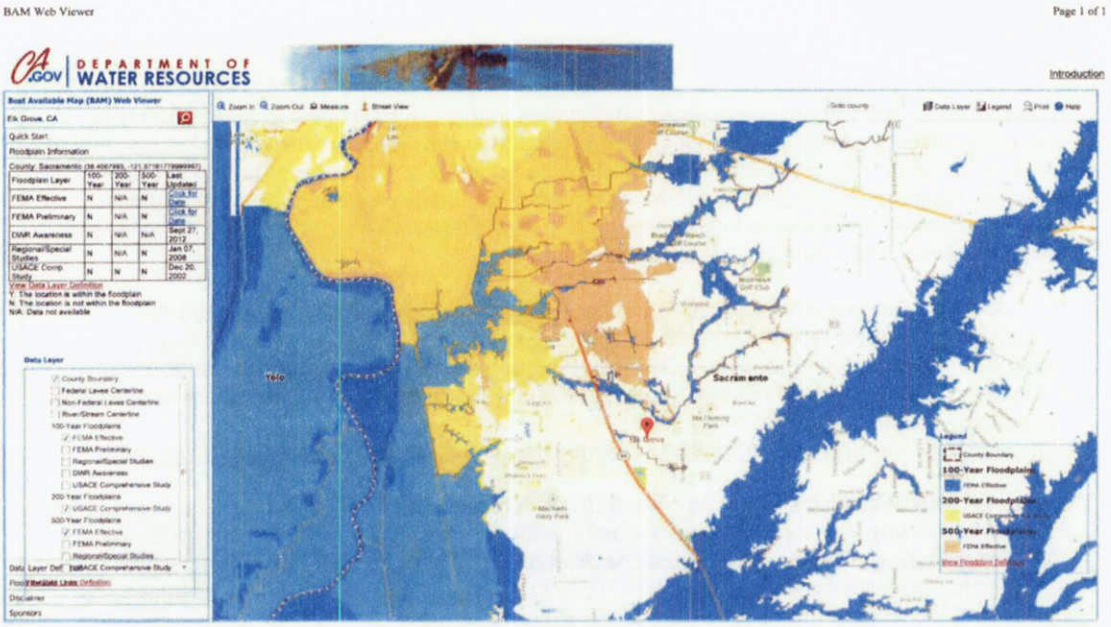
Sincerely,

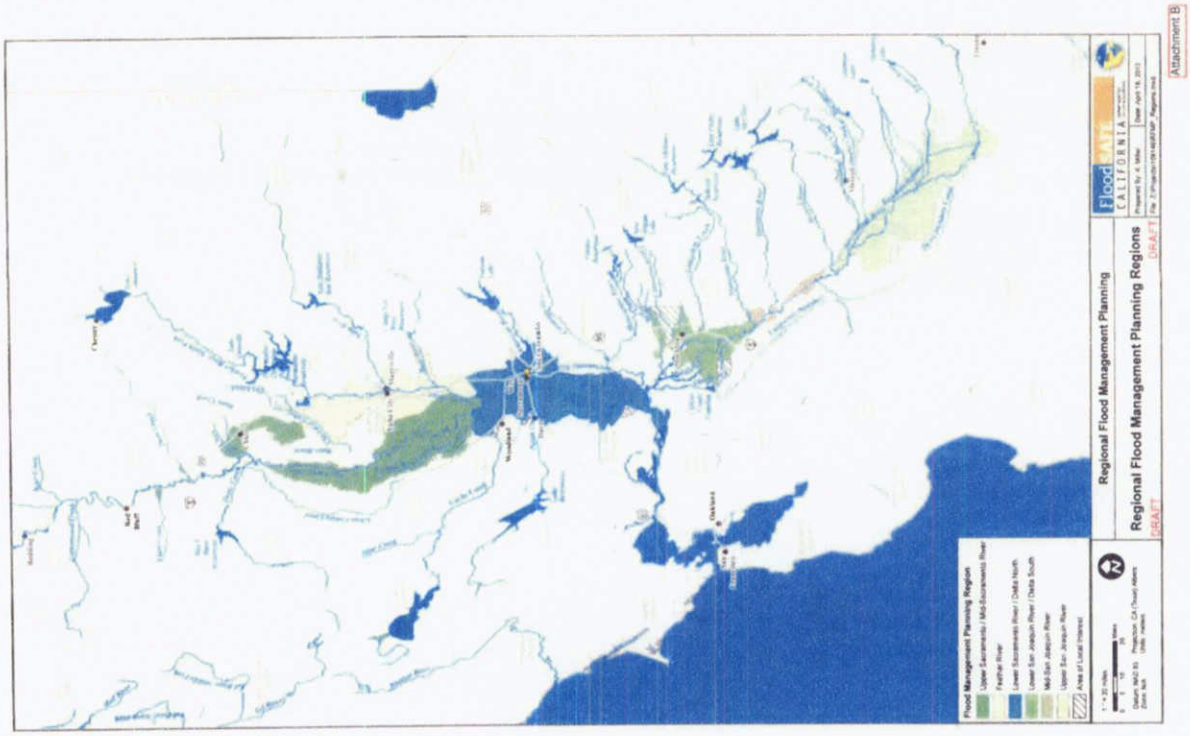
Jay S. Punia
Executive Officer

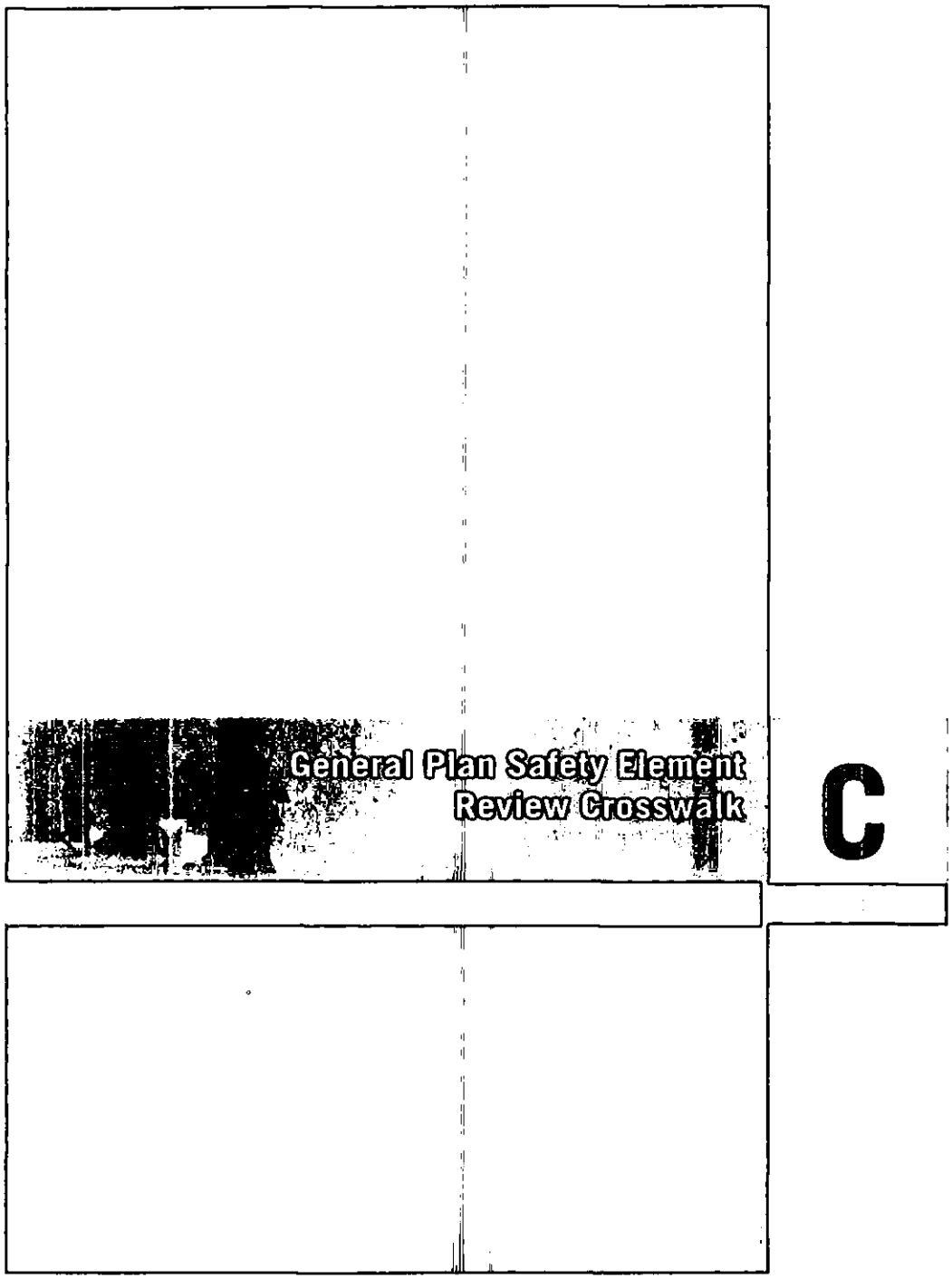
Attachments: A – 100, 200, & 500 year floodplain zone maps
B – Draft Regional Flood Management Planning Regions
Appendix C, General Plan Safety Element – Review Crosswalk (11 pages)

cc: CVFPB Board Members
Jon Tice, CVFPB
James Herota, CVFPB

Letter B Attachments






General Plan Safety Element
Review Crosswalk
C

CENTRAL VALLEY FLOOD PROTECTION BOARD
GENERAL PLAN SAFETY ELEMENT REVIEW CROSSWALK

The General Plan Safety Element Review Crosswalk is based on the currently effective requirements of Government Code Section 65302.7, which state each city and county within the boundaries of the Sacramento-San Joaquin Drainage District (SSJDD) must submit the draft safety element, or draft amendment to the safety element, to the Central Valley Flood Protection Board (CVFPB) for review 90 days prior to element adoption. The CVFPB then has 60 days to review the safety element and provide written recommendations for changes regarding:

1. Uses of land and policies in areas subjected to flooding that will protect life, property, and natural resources from unreasonable risks associated with flooding.
2. Methods and strategies for flood risk reduction and protection within areas subjected to flooding.

Each city and county must consider the Board's recommendations prior to the adoption of the draft safety element. If the legislative body determines not to accept all or some of the recommendations, findings must be made in writing to the Board that states the reasons why. If the Board's recommendations are not available within 60 days, action can be taken by the local jurisdiction without the recommendations devoid of penalty; however, if recommendations are submitted after the 60 days, the local governing body must consider the recommendations at the next time the jurisdiction considers amendments to the safety element.

Consultation with the Central Valley Flood Protection Board

Prior to preparation or revision of the safety element cities and counties must consult with the CVFPB based on the currently effective requirements of Government Code Section 65302(g)(5). The purpose of the consultation with the CVFPB is to assist with guidance related to areas subject to flooding and to direct jurisdictions to the most current relevant technical information available regarding flood risk reduction and protection. It is recommended that cities and counties consult with the CVFPB through written communication, phone calls, and/or electronic communication at http://www.cvfpb.ca.gov/.

PART 1 – INSTRUCTIONS

Please fill out the application information below under Part 2, along with the checklist requirements within Part 3, Sections I and II "Jurisdictions to Fill out" columns and return, along with the draft safety element to:

Central Valley Flood Protection Board (CVFPB), Encroachment Control & Land Use Section
3310 El Camino Avenue, Room 151
Sacramento, California 95821

PART 2 – APPLICATION INFORMATION

Jurisdiction to Fill Out			
Jurisdiction:	Mailing Address:		
Jurisdiction Contact/Title:	Phone Number:	E-mail Address:	Date of draft safety element:
CVFPB Reviewer/Title:		CVFPB Receipt Date:	

PART 3 – CHECKLIST OF REQUIREMENTS

Government Code Section 65302(g) includes 2007 State flood risk management legislative direction to local jurisdictions to review and revise the general plan safety element to identify new information regarding flood hazards. For guidance regarding how to respond to the specific requirements under Section I and II below, reference the Department of Water Resources' *Handbook for Implementing California Flood Legislation into Local Land Use Planning* at http://www.water.ca.gov/floodmgmt/ or http://www.water.ca.gov/LocalFloodRiskPlanning/.

This Review Crosswalk serves as a typical checklist that is required by the CVFPB and other agencies; however, the CVFPB and other agencies may ask for more information in addition to this checklist.

Items to Consider before Filling out the Review Crosswalk

Cities and counties are required to submit the draft general plan safety *element or draft* general plan safety element amendments to the CVFPB only if the bottom two conditions apply:

1. Is the city or county located within Sacramento-San Joaquin Drainage District? If yes, continue with the Review Crosswalk.
2. Is it a draft general plan safety element or draft general plan safety element amendment? If yes, continue with the Review Crosswalk.

Scoring System

The scoring system for the Review Crosswalk is based on the review of the safety element requirements under Sections I and II below and the resulting findings from the CVFPB if the requirements have been "met" or "not met."

Section I: Identification of Flood Hazard Information

Jurisdiction to Fill Out					
Safety elements must identify information regarding flood hazards per GC 65302(g)(2)(A)	**Jurisdiction's Notes for CVFPB Reviewer**	**Location in the Safety Element/ Page #**			
1. *Does the new or* updated safety element include flood hazard zones, as identified by FEMA?		Page_____	☐	☐	

Jurisdiction to Fill Out					
Safety elements must identify information regarding flood hazards per GC 65302(g)(2)(A)	Jurisdiction's Notes for CVFPB Reviewer	Location in the Safety Element/ Page #			
ii. Does the new or updated safety element include National Flood Insurance Program (NFIP) maps, published by FEMA?		Page_____	☐	☐	☐
iii. Does the new or updated safety element contain information about flood hazards available from the U.S. Army Corps of Engineers including the Corps Sacramento and San Joaquin River Basins Comprehensive Study?		Page_____	☐	☐	☐
iv. Does the new or updated safety element include dam failure inundation maps, available from CalEMA (prepared pursuant to GC Section 8589.5)?		Page_____	☐	☐	☐

Central Valley Flood Protection Board (CVFPB) Safety Element Review Crosswalk Page 3

Jurisdiction to Fill Out					
Safety elements must identify information regarding flood hazards per GC 65302(g)(2)(A)	Jurisdiction's Notes for CVFPB Reviewer	Location in the Safety Element/ Page #	Comments	Yes	No
v. Does the new or updated safety element include designated floodway maps, available from the CVFPB?		Page_____		☐	☐
vi. Does the new or updated safety element include Awareness Floodplain Mapping Program maps and 200-year flood plain maps, available from DWR?		Page_____		☐	☐
vii. Does the new or updated safety element include maps of levee flood protection zones (LFPZs), available from DWR?		Page_____		☐	☐

Central Valley Flood Protection Board (CVFPB) Safety Element Review Crosswalk Page 4

Jurisdiction to Fill Out			[redacted]		
Safety elements must identify information regarding flood hazards per GC 65302(g)(2)(A)	Jurisdiction's Notes for CVFPB Reviewer	Location in the Safety Element/ Page #	[redacted]		
viii. Does the new or updated safety element include areas subject to inundation in the event of the failure of project or nonproject levees or floodwalls (contact DWR for assistance, if needed)?		Page_____		☐	☐
ix. Does the new or updated safety element include historical data on flooding including locally prepared maps of areas that are subject to flooding, areas that are vulnerable to flooding after wildfires, and sites that have been repeatedly damaged by flooding, varies by Jurisdiction (contact DWR for assistance, if needed)?		Page_____		☐	☐

Jurisdiction to Fill Out					
Safety elements must identify information regarding flood hazards per GC 65302(g)(2)(A)	Jurisdiction's Notes for CVFPB Reviewer	Location in the Safety Element/ Page #	[illegible]	Yes	No
x. Does the new or updated safety element include existing and planned development in flood hazard zones, including structures, roads, utilities, and essential public facilities, varies by jurisdiction (contact DWR for assistance, if needed)?		Page_____		☐	☐
x1. Does the new or updated safety element include reference to local, state, and federal agencies with responsibility for flood protection, including special districts and local offices of emergency services?		Page_____		☐	☐

Central Valley Flood Protection Board (CVFPB) Safety Element Review Crosswalk Page 6

Section II: Protection of the Community from the Unreasonable Risks of Flooding

Based on the above information in Section I, safety elements must establish a set of comprehensive goals, policies, and feasible implementation measures under GC 65302(g)(2)(B) and 65302(g)(2)(C)	Jurisdiction's Notes for CVFPB Reviewer	Location in the Safety Element/Page #			Jurisdiction to Fill Out		
		✓ Goal	✓ Policy	✓ Imp. Measure			
Do the new or updated safety element goals, policies, and implementation measures accomplish the following:							
I. Avoid or minimize the risks of flooding to new development?		Page____			☐	☐	☐
		☐	☐	☐			
II. Part a: Evaluate whether new development should be located in flood hazard zones?		Page____			☐	☐	☐
		☐	☐	☐			

Central Valley Flood Protection Board (CVFPB) Safety Element Review Crosswalk Page 7

Appendix C

Jurisdiction to Fill Out					CVFPB Use Only		
Based on the above information in Section I, safety elements must *establish a set of* comprehensive goals, policies, and feasible implementation measures under GC 65302(g)(2)(B) and 65302(g)(2)(C)	***Jurisdiction's Notes for* CVFPB Reviewer**	**Location in the Safety Element/Page #** ✓ **Goal**	✓ **Policy**	✓ **Imp. Measure**	CVFPB Reviewer Comments	Score ✓ MET	✓ NOT MET
Do the new or updated safety element goals, policies, and implementation measures accomplish the following:							
II. Part b: Identify construction *methods or other* methods to minimize damage if new development is located in flood hazard zones?		Page_______ ❑	❑	❑		❑	❑
III. *Maintain the structural* and operational integrity of essential public facilities during flooding?		Page_______ ❑	❑	❑		❑	❑

Jurisdiction to Fill Out								
Based on the above information in Section I, safety elements must establish a set of comprehensive goals, policies, and feasible implementation measures under GC 65302(g)(2)(B) and 65302(g)(2)(C)	Jurisdiction's Notes for CVFPB Reviewer	Location in the Safety Element/Page #						
		Goal	Policy	Imp. Measure				
Do the new or updated safety element goals, policies, and implementation measures accomplish the following:								
IV. Locate, when feasible, new essential public facilities outside of flood hazard zones (including hospitals and health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities) or identify construction methods or other methods to minimize damage if these facilities are located in flood hazard zones?	Page_____	☐	☐	☐				

Central Valley Flood Protection Board (CVFPB) Safety Element Review Crosswalk Page 9

Jurisdiction to Fill Out								
Based on the above information in Section I, safety elements must establish a set of comprehensive goals, policies, and feasible implementation measures under GC 65302(g)(2)(B) and 65302(g)(2)(C)	Jurisdiction's Notes for CVFPB Reviewer	Location in the Safety Element/Page #						
		✓ Goal	✓ Policy	✓ Imp. Measure				
Do the new or updated safety element goals, policies, and implementation measures accomplish the following:								
V. Establish cooperative working relationships among public agencies with responsibility for flood protection?	Page_____	☐	☐	☐			☐	☐

Section III – Additional Considerations and Information the Central Valley Flood Protection Board Recommends Including

- Identify evacuation routes in the event of floods or dam failure inundations.
- If the city or county is vulnerable with inundation by more than one dam failure, delineate each dam inundation area resulting from each dam failure.
- The safety element and/or land use element must mention that if any project, including the modification of an existing project, falls within the jurisdiction regulated by the CVFPB, the city or county must apply for an encroachment permit from the Board. The Board exercises jurisdiction over the levee cross-section, the waterward area between project levees, a 10-foot-wide strip adjacent to the landside levee toe, within 30 feet of the top of the banks of unleveed project channels, and within designated floodways adopted by the Board. Activities outside of these limits which could adversely affect flood control projects are also under Board jurisdiction.
- Include a plan that differentiates the existing and planned development areas, and also includes flood hazard zones (associated with the above Section I, "x").
- Include geographic information systems (GIS) electronic mapping that layers floodplain mapping information, land use designations, safety evacuation routes, natural features, dam failure inundation, and other applicable flood risk management information on one figure at a minimum scale of 11x17 format.

Section I Req. Met: _____/11	Section II Req. Met: _____/6
Section I Req. Not Met: _____/11	Section II Req. Not Met: _____/6

Comments:

Central Valley Flood Protection Board (CVFPB) Safety Element Review Crosswalk Page 10

Letter B Jay S. Punia, Central Valley Flood Protection Board (CVFPB)

Response B-1: The commentor indicates that the CVFPB staff has reviewed the documentation for the Project. The commentor's specific comments are addressed under Responses B-2 through B-5 below.

Response B-2: The commentor states that the City is within the 100-, 200-, and 500-year floodplains. The commentor suggests that the City follow current State flood management policy set forth in Government Code Sections 65865.5, 65962, and 66474.5, which discourage residential development within floodplains unless there is an adequate flood protection system present. While this comment does not address the adequacy of the Draft EIR, the commentor is referred to the discussion *provided* for Impact 3.6-3, which discusses the potential for the Project to result in flooding, and Impact 3.6-5, which addresses potential impacts *associated with* the 100-year flood hazard area, in Section 3.6 of the Draft EIR. The commentor is referred to the discussion under Impact 3.6-5 identifies City requirements designed to protect persons and property from flooding, including General Plan policies and actions, the City's Floodplain Management Policy, and Municipal Code requirements. It should be noted that the CEQA thresholds of significance (Appendix G of the CEQA Guidelines) do not include thresholds for the 200- and 500-year flood hazard area. Subsequent development projects are required to be consistent with State law, including the requirements of Government Code Sections 65865.5, 65962, and 66474.5, which identify specific requirements associated with residential development located in a flood hazard zone. The comment is noted and no revision to the Draft EIR is necessary.

Response B-3: The commentor suggests that City staff become involved with the Regional Flood Management Planning effort for the Lower Sacramento River/Delta North Planning Region and provides contact information. The comment is noted and no revision to the Draft EIR is necessary.

Response B-4: The commentor states that the road embankments of Interstate 5 and State Route 99 may act as barriers to flood evacuation as well as impede floodwaters. The commentor states that in a flooding event, emergency services may be isolated from certain areas of the City due to these roadway barriers and their retained floodwaters. While this comment does not address the adequacy of the Draft EIR, the commentor is referred to the discussion under Impact 3.5-2 in Section 3.5 of the Draft *EIR. As discussed* under Impact 3.5-2, the Sacramento County Multi-Hazard Mitigation Plan addresses the planned response to emergency situations associated with disasters, including flooding disasters. Evacuation and access to critical facilities in the City is addressed under the Sacramento County Multi-Hazard Mitigation Plan and the City's Emergency Operations Plan. The Project would not impair implementation of or interfere with either of these plans. The comment is noted and no revision to the Draft EIR is necessary.

Response B-5: The commentor states that AB 162 requires cities and counties in the Central Valley to amend the land use, conservation, safety, and housing elements of their general plans to address flood-related matters. The commentor refers to the Implementing State Flood Risk *Management* Legislation into Local Land Use Planning, A Handbook for Local Communities prepared by the California Department of Water Resources and provides a link to the handbook. The commentor also provides a general plan checklist from the handbook for the City's use. This information does not pertain to the adequacy of the Draft EIR. The Draft EIR addresses environmental impacts associated with flooding that would result from the Project in Section 3.6 of the Draft EIR. This comment is noted and no revision to the Draft EIR is necessary.

LETTER C

Robert Pierce
Associate Superintendent
Facilities and Planning

Robert L. Trigg Education Center
9510 Elk Grove-Florin Road, Elk Grove, CA 95624

(916) 686-7711
FAX: (916) 686-7754

January 29, 2014

Ms. Sarah Bontrager
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

SUBJECT: Comments on the Draft Environmental Impact Report for the Elk Grove Housing Element Update

Dear Ms. Bontrager:

The Elk Grove Unified School District (EGUSD) appreciates the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) for the Elk Grove Housing Element Update. EGUSD requests that the following comments be considered and included in the Final Environmental Impact Report. C-1

Comments on Pages 3.10-19 to 3.10-21:

EGUSD appreciates that the DEIR acknowledges that implementation of this project may contribute to school overcrowding. Because the impact of this proposed project is complex and far reaching, EGUSD has prepared a detailed analysis to outline the potential impacts for each of the candidate sites. Attached is a chart that details the specific impact to existing schools of each of the proposed multi-family sites studied in the DEIR.

The DEIR explains the statutory maximum school impact fees a school district is allowed to levy at the building permit stage. However, it is important to note that there are many other contributing factors and circumstances beyond the maximum statutory impact fee, particularly for potential large infill projects. As an example, many of our existing schools have reached their maximum potential in terms of the site's size and ability to accommodate additional facilities needed to house additional students. Should a large infill housing project be constructed within such a school's attendance area, it would not be possible to construct the additional classrooms needed to house the new students. So too in many cases, the essential core facilities (i.e. playground, library, restrooms, multi-purpose room, etc.) at a campus may not be large enough to adequately accommodate additional students, and it may not be practical to expand those core facilities for many reasons, including site size constraints. C-2

The proposed project will result in a significant regional and cumulative impact to our educational facilities. Most of our schools are at capacity and many are currently overcrowded and as a result are offloading students to other schools. Offloading students to a school other than their neighborhood school is costly to the District and disruptive to families.

As the DEIR describes, in 1998 SB 50 created a new California school facilities funding mechanism. This new school facility program authorizes Districts lacking capacity for students generated from new home construction to levy school impact fees. The school impact fees are intended to provide the 50% local share of the cost to construct new school facilities to house the students from the new homes. The

remaining 50% is allocated by the Office of Public School Construction. However, as of today, the State has exhausted its bonding authority and is not participating in any new school construction projects absent a future statewide school bond or similar measure. Compounding this problem is the fact that the ability of school districts to levy Level III fees (equal to twice the developer impact fees when State funding is unavailable) has been suspended by the legislature. Additionally, the funding provided by the impact fees and the State are based on State determined formulas, which in many cases may not fully fund the actual costs of the new school or classrooms.

C-2

Generally, during the planning stages of new residential projects, school sites are identified on the land use plans to accommodate the anticipated new students. Subsequent rezoning of parcels to increase residential density results in a need to re-evaluate the number of schools needed for that development. Additionally (and more problematic), rezoning "infill" parcels to high density multifamily use in existing neighborhoods could generate many unanticipated students without providing the opportunity to mitigate the impact with additional schools.

It is the District's hope that as the City of Elk Grove deliberates, analyzes and ultimately approves candidate sites for its Housing Element Update that the impact to schools will be a strong consideration so that future residents at the selected sites can be adequately served by the District. Moving forward the District would welcome the opportunity to coordinate with the City on this important project.

Corrections on Page 3.10-5 (Schools Section):

Please change the second sentence of the first paragraph to: *The District covers nearly 320 square miles and has been in existence ~~41~~ 54 years.*

C-3

The first two sentences of the second paragraph on the same page should read: *The Elk Grove Unified School District is the ~~12th~~ 5th largest school district in California. ~~and one of the fastest growing school districts in the nation.~~ Approximately 20% of the District's students are on a four-track year-round schedule and attend school for three months then are off for a month.*

Corrections on Page 3.10-20 (Schools Section):

The sentence: "*EGUSD has nine elementary schools, two high/middle schools and two alternative high schools planned to accommodate anticipated future growth in the District.*" is apparently pulled from the District's 2013 School Facility Needs Analysis (SFNA) and should either be deleted or a statement added to clarify the source and intent. As part of the District's SFNA this information outlines specific district wide needs which are limited by statue to five years and is based on known planned development. None of the candidate sites are anticipated in the SFNA and the District has needs far beyond the next five years.

C-4

EGUSD appreciates the City's consideration of the comments and requests in this letter.

Sincerely,

Kim Williams

Kim Williams
Planning Manager

Potential Impact of Candidate Sites to Existing EGUSD Schools

Map ID	Acres	Location	Anticipated Dwelling Units	Elementary Area	Number of Elementary Students	Secondary Area	Number of MS Students	Number of HS Students
C-10	7.49	Stonelake, West Taron at Riparian	187	Elliott Ranch	57	Pinkerton/ Cosumnes Oaks	15	30
C-26	5.21	Stonelake, West Taron at Elk Grove Boulevard	130	Elliott Ranch	40	Pinkerton/ Cosumnes Oaks	10	21
				Total Elliott Ranch	**97**			
C-12	n/a	Southeast Policy Area	1,500	Franklin	459	Pinkerton/ Cosumnes Oaks	117	239
C-18	9.5	SW corner of Poppy Ridge and Big Horn	238	Franklin	73	Pinkerton/ Cosumnes Oaks	19	38
C-19	0.9	SW corner of Poppy Ridge and Big Horn	23	Franklin	7	Pinkerton/ Cosumnes Oaks	2	4
C-20	1.6	SW corner of Poppy Ridge and Big Horn	40	Franklin	12	Pinkerton/ Cosumnes Oaks	3	6
						Total Pinkerton/ Cosumnes Oaks	**166**	**337**
C-15	2.96	Willard Parkway at Bilby Road	74	Franklin	23	Johnson/ Franklin	6	12
C-16	3.35	Willard Parkway at Bilby Road	84	Franklin	26	Johnson/ Franklin	7	13
C-17	2.68	Willard Parkway at Bilby Road	67	Franklin	20	Johnson/ Franklin	5	11
				Total Franklin	**620**			

Map ID	Acres	Location	Anticipated Dwelling Units	Elementary Area	Number of Elementary Students	Secondary Area	Number of MS Students	Number of HS Students
C-27	9.4	Maritime, just west of Harbor Point	235	Stone Lake	72	Johnson/ Franklin	18	37
C-31	3	Harbour Point at Maritime	75	Stone Lake	23	Johnson/ Franklin	6	12
				Total Stone Lake	**95**	**Total Johnson/ Franklin**	**42**	**85**
C-24	16.26	Elk Grove Boulevard near Laguna Springs Drive	407	Donner	125	Eddy/ Laguna Creek	32	65
				Total Donner	**125**			
C-39	6.44	Laguna Boulevard and Bruceville Road	161	Ehrhardt	49	Eddy/ Laguna Creek	13	26
				Total Ehrhardt	**49**			
C-25	3.39	Elk Grove Boulevard at Backer Ranch	85	Foulks Ranch	26	Eddy/ Laguna Creek	7	14
C-32	3.2	Elk Grove Boulevard, just west of Carlton Plaza	80	Foulks Ranch	24	Eddy/ Laguna Creek	6	13
				Total Foulks Ranch	**50**			
C-13	3.91	Laguna West Town Center	98	Sims	30	Eddy/ Laguna Creek	8	16
C-14	3.92	Laguna West Town Center	98	Sims	30	Eddy/ Laguna Creek	8	16
C-28	2.63	Laguna West Town Center	66	Sims	20	Eddy/ Laguna Creek	5	11
C-29	2	Laguna West Town Center	50	Sims	15	Eddy/ Laguna Creek	4	8

Map ID	Acres	Location	Anticipated Dwelling Units	Elementary Area	Number of Elementary Students	Secondary Area	Number of MS Students	Number of HS Students
C-30	2.93	Laguna West Town Center	73	Sims	22	Eddy/ Laguna Creek	6	12
C-6	6.97	Laguna West Town Center	174	Sims	53	Eddy/ Laguna Creek	14	28
C-7	5.56	Laguna West Town Center	139	Sims	43	Eddy/ Laguna Creek	11	22
				Total Sims	**214**			
C-2	6.50[i]	NW corner of Big Horn and Bruceville Road	163	West	50	Eddy/ Laguna Creek	13	26
C-41	15	SE Corner of Bruceville and Sheldon	375	West	115	Eddy/ Laguna Creek	29	60
				Total West	**165**	**Total Eddy/ Laguna Creek**	**154**	**313**
C-23	18.23	Sheldon Road at Vytina Drive	456	Case	139	Harris/ Monterey Trail	36	73
				Total Case	**139**			
C-1	8.68	East Stockton Blvd just north of Sheldon Road	217	Herburger	66	Harris/ Monterey Trail	17	35
C-33	9.8	East Stockton Boulevard at Bow Street	245	Herburger	75	Harris/ Monterey Trail	19	39
C-40	10.34	East Stockton Boulevard south of Calvine	259	Herburger	79	Harris/ Monterey Trail	20	41
				Total Herburger	**221**			
C-21	4.41	Elk Grove Florin Road just south of Calvine	110	Bella	34	Harris/ Monterey Trail	9	18
						Total Harris/ Monterey Trail	**101**	**205**

Map ID	Acres	Location	Anticipated Dwelling Units	Elementary Area	Number of Elementary Students	Secondary Area	Number of MS Students	Number of HS Students
C-22	12.61	Brown Road, south of Calvine Road	315	Butler	96	Smedberg/ Sheldon	25	50
C-8	6.31	Calvine Road east of Elk Grove Florin Road	158	Butler	48	Smedberg/ Sheldon	12	25
C-9	7.97	Brown Road, south of Calvine Road	199	Butler	61	Smedberg/ Sheldon	16	32
				Total Butler	**239**	**Total Smedberg/ Sheldon**	**53**	**107**
C-34	8.14	East Stockton Boulevard south of Bond Road	204	Feickert	62	Kerr/ Elk Grove	16	32
C-35	3.74	East Stockton Boulevard at Banff Vista Drive	94	Feickert	29	Kerr/ Elk Grove	7	15
				Total Feickert	**91**			
C-36	2.97	East Stockton Boulevard south of Elk Grove Blvd	74	Markofer	23	Kerr/ Elk Grove	6	12
C-37	4.34	East Stockton Boulevard at Hampton Oak Drive	109	Markofer	33	Kerr/ Elk Grove	9	17
				Total Markofer	**56**	**Total Kerr/ Elk Grove**	**38**	**77**
				GRAND TOTAL	**2160**		***552***	***1124***

Letter C Kim Williams, Elk Grove Unified School District (EGUSD)

Response C-1: The commentor expresses their appreciation for the opportunity to review and comment on the Draft EIR. The commentor's specific comments are addressed under Responses C-2 through C-5 below.

Response C-2: The commentor appreciates that the Draft EIR acknowledges that Project implementation may contribute to school overcrowding. The commentor has prepared a chart the details the specific impact to existing schools of each of the proposed multifamily sites studied in the Draft EIR. The commentor's chart is provided as Attachment to Letter C and shows that the Project would result in 2,160 elementary students, 552 middle school students, and 1,124 high school students and identifies the amount of students that would be added to the service area of each elementary, middle, and high school affected by the Project. It is noted that the commentor's chart assumes that all of the multifamily sites will develop with housing that is not age-restricted.

The commentor identifies that while the Draft EIR explains the statutory maximum school impact fees that a school district is allowed to levy, that there are many other contributing factors and circumstances beyond the statutory impact fee, particularly for large infill projects. The commentor states that many of EGUSD's existing schools have reached their maximum ability to accommodate additional facilities to house additional students and that if large in-fill projects are constructed within such a school's attendance area, it would not be possible to construct the additional classrooms needed to house the students and that essential core facilities (e.g., playground, library, restrooms, etc.) may not be large enough to accommodate additional students.

The commentor states that the Project will result in a significant regional and cumulative impact to their school facilities, as many EGUSD schools are at capacity and many are overcrowded and are offloading students to other schools.

The commentor states that, as described by the Draft EIR, SB 50 created a new California school facilities funding mechanism. However, while the school impact fees are intended to provide the 50% local share of the cost to construct new school facilities to house the students from the new homes, the State has exhausted its bonding authority to fund the remaining 50% that is allocated by the Office of Public School Construction for new school construction projects. Further, the ability of school districts to levy Level III fees has been suspended by the legislature. The commentor also states that the formulas that the impact fees are based on do not fully fund the actual costs of the new school or classrooms in many cases.

The commentor states that during the planning stages of new residential projects school sites are typically identified on the land use plans and that subsequent rezoning of parcels to increase residential density results in a need to re-evaluate the number of schools needed for that development. The commentor would like the impact to schools to be strongly considered

as the City deliberates, analyzes, and approves candidate sites for the Project so that future residents at the selected sites can be adequately served by EGUSD. EGUSD welcomes the opportunity to coordinate with the City on the Project.

EGUSD's concerns regarding the increase in the number of students and capacity of the existing schools to accommodate students generated by the Project is noted. No revisions to the Draft EIR are warranted to address these concerns, as the Projects impacts on school facilities are deemed fully mitigated through school impact fee as described under Impact 3.10-2 on pages 3.10-17 and 3.10-18 of the Draft EIR. The concerns of EGUSD regarding site selection and consideration of schools that are at capacity is referred to the decision-makers for consideration.

Response C-3: The commentor identifies corrections to three sentences on page 3.10-5 of the Draft EIR. These corrections are made in Section 3.0, Errata, of this Final EIR.

Response C-4: The commentor states that the sentence "EGUSD has nine elementary schools, two high/middle schools and two alternative high schools planned to accommodate anticipated future growth in the District." Should be clarified as EGUSD's School Facility Needs Analysis outlines specific district-wide needs which are limited by statute to five years and based on known planned development. The commentor indicates that none of the candidate sites are anticipated in the SFNA and EGUSD has needs beyond the next five years. It should be noted that the Project does not entitle nor otherwise approve any development projects. This statement has been clarified in the Draft EIR, as shown in Section 3.0, Errata, of this Final EIR. However, it is noted that although the commentor states that EGUSD did not anticipate any of the candidate sites in the SFNA, 14 sites are currently designated by the General Plan for high density residential use (Sites 2, 3, 4, 5, 6, C-12, C-13, C-14, C-18, C-19, C-20, C-25, C-33, C-34,), one site is currently designated by the General Plan for medium density residential use (Site C-1), three sites are currently designated by the General Plan for commercial/office/multifamily use (Sites 7A, C-36, and C-39), and 13 sites are designated by the General Plan for low density, estate, or rural residential uses (Sites C-21 through C-23, C-26, C-32, and C-40 are designated for low density residential uses. Sites C-15 through C-17 are designated for estate residential uses. Sites C-2, C-8, C-9, and C-41). While the Project would increase the potential number of units on these sites, these sites are designated by the General Plan for residential development and currently have the potential to generate EGUSD students.

LETTER 1

Hydrox Properties XII, LLC
3170 Hilltop Mall Road
Richmond, CA 94806

Via email sbontrager@elkgrovecity.org

December 19, 2013

Sarah Bontrager, Housing Program Manager
Development Services, Planning
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

RE: **EIR Comments**
2013-2021 Housing Element (GPA 14-02)
NWC Laguna/Bruceville (the "Property")
APN's 116-138-002 thru -006, -008 & -009, & 116-0011-020 & -021

Dear Sarah:

Please be advised that Hydrox Properties XII, LLC is the owner of the Property which is comprised of the Outback Steakhouse, TGIFridays and about 8 acres of vacant land. We are aware that there is a proposal pending to change general plan designations and/or rezone certain properties, and that parcels 116-0011-020, 021, and 116-1380-008, 009 of the Property are among those being considered (site C-39).

1-1

We understand that the City has a shortfall of sites to accommodate its very low and low income needs, so the City is considering amending its General Plan land use designations and/or zoning in order to accommodate the City's share of regional housing needs. Site C-39 is being considered for an HDR general plan designation, and an RD-25 zoning designation.

We are writing to comment on the Draft EIR and to request that the Property NOT be considered for these new designations. Following are our specific comments:

1-2

- The property is presently zoned SC (shopping center). Shopping centers are intended to be adjacent to higher density residential developments, so the Property is already appropriately zoned.

- The Property has been fully approved including a tentative parcel map, site plan, design review, sign criteria, etc. for development of the unbuilt portion as Phase II of the Laguna Creek Shopping Center. The Property is presently in escrow with an expected close in the first quarter of 2014. The purchaser is an experienced retail developer who is planning the Phase II buildout of the Property.

1-3

- The Property and adjacent properties not owned by us are subject to a Declaration of Covenants, Conditions and Restrictions and Grants of Easements for Laguna Creek Center. As addressed in a separate letter, for a number of reasons, housing is not currently permitted under the terms of the Declaration, so housing could not be developed regardless of whether the property might be redesignated as proposed in GPA 14-02.

Hydrox Properties XII, LLC
3170 Hilltop Mall Road
Richmond, CA 94806

Further, the redesignation would cause part of the Property to be redesignated but others to remain under the current SC zoning, causing confusion with the conditions of approval placed on the Property when the entitlements were granted.

Finally, if for some reason the contemplated fully entitled shopping center were not to be pursued, and if the Declaration could be amended to permit such a residential use, the current general plan designation would permit multi-family housing on the Property. 1-3

- Land Use Policy LU-6 states that multi family sites should be no smaller than 8 acres. Site C-39 is significantly smaller.
- Land Use Policy LU-6 also states that to reduce overconcentration of multi-family development in Elk Grove, multi-family sites should be at least 1/3 mile apart. This site is immediately adjacent to another multi-family project to the north. 1-4
- Section 3.9 of the draft EIR states that no projects are proposed at this time. This is not the case with the Property: Phase II of the Laguna Creek Shopping Center, a fully entitled project, is proposed, and pre-development work has been ongoing for a number of months including several meetings with City staff. 1-5
- The City's housing goals can be met with Alternative 2 that does not include site C-39. 1-6
- It is unclear to us if a more thorough study is required in order to determine if the impacts would be less than significant impact or no impact as is assumed in the EIR. 1-7
- Relatively poor access to the C-39 site (through the commercial property along Laguna Boulevard to the south and a single point along Bruceville Road) will make ingress and egress to and from any residential project challenging. 1-8

If you have any questions or comments, please feel free to contact me at (925) 256-3043 or david_messing@mechanicsbank.com.

Very truly yours,

David P. Messing
Authorized Signer

Cc: David Greensfelder

Letter 1 David P. Messing

Response 1-1: The commentor identifies Hydrox Properties XII, LLC as the owner of the property comprised of the Outback Steakhouse, TGIFridays, and 8 acres of vacant land. The commentor states their awareness of the Project's proposal to change General Plan designations and/or rezone certain properties and identifies three parcels as Site C-39. The commentor states that Site C-39 is being considered for an HDR (high density residential) General Plan designation and RD-25 zoning designation. The comment is noted.

Response 1-2: The commenter states that they are writing to comment on the Draft EIR and to request that the Property not be considered for these new designations. This comment is noted for the decision-makers' consideration. The commentor's specific concerns are addressed in Responses 1-3 through 1-8.

Response 1-3: The commentor states that the property is zoned SC (shopping center) and identifies existing entitlements (tentative parcel map, site plan, design review, etc.) While the comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration. The commentor identifies that the property is subject to a Declaration of Covenants, Conditions, and Restrictions and Grants of Easement (Declaration) for Laguna Creek Center. The commentor also states that if the contemplated and fully entitled shopping center were not to be pursued and if the Declaration were amended to permit multifamily residential use, the current General Plan designation would permit multifamily housing on the property. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 1-4: The commentor identifies that General Plan Policy LU-6 states that multifamily sites should be no smaller than 8 acres and notes that Site C-39 is significantly smaller. The commentor identifies that Policy LU-6 also states that to reduce overconcentration of multifamily development, multifamily sites should be at least 1/3 mile apart and notes that the site is immediately adjacent another multifamily project to the north. It should be noted that the language in Policy LU-6 is advisory, not obligatory. The Project would revise Policy LU-6 to remove the list of criteria and to refer to the criteria identified in Policy H-3 Action 1 (see Section 3.0, Errata). The Project's consistency with applicable land use plans, policies, and regulations adopted to avoid or mitigate an environmental effect is addressed under Impact 3.7-1 in the Draft EIR. As discussed under Impact 3.7-1, the Project would have a less than significant impact related to consistency with land use plans, policies, and regulations. This comment is noted for the decision-makers' consideration. No revision to the Draft EIR is necessary.

Response 1-5: The commentor states that Section 3.9 identifies that no projects are proposed at this time, but that is not the case with their property as Phase II of the Laguna Creek Shopping Center is entitled, proposed, and pre-development work is ongoing.

On page 3.9-4, the Draft EIR states: "While no specific development projects are proposed at this time, subsequent multifamily development on any or all of the opportunity sites would represent an increase in the population growth on these sites that was anticipated in the General Plan and analyzed in the General Plan EIR." There are no multifamily development projects proposed in conjunction with the Project. The commentor is referred to Table 2.0-1 on page 2.0-11 of the Draft EIR which identifies that there is an approved tentative map and design review for Site C-39. No revision to the Draft EIR is necessary.

Response 1-6: The commentor states that the City's housing goals can be met with Alternative 2 that does not include site C-39. Alternative 2 is described in detail in Section 5.0 of the Draft EIR. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 1-7: The commentor states that it is unclear if a more thorough study is required in order to determine if the impacts would be less than significant impact or no impact as is assumed in the EIR. The commentor does not identify any specific impacts nor does the commentor reference any specific analysis presented in the Draft EIR. The Draft EIR identifies potential impacts associated with the Project in Sections 3.1 through 4.0 and provides an explanation for the significance determination associated with each impact. No revision to the Draft EIR is necessary.

Response 1-8: The commentor states that relatively poor access to Site C-39 (through the commercial property along Laguna Boulevard and a single point along Bruceville Road) will make ingress and egress challenging for any residential project. While this comment does not directly address the Draft EIR, the commentor is referred to Section 3.11, Transportation and Circulation, of the Draft EIR. Any subsequent residential project would be required to provide access consistent with the City's Improvement Standards. Impact 3.11-2 on page 3.11-35 of the Draft EIR identifies that consistency with relevant General Plan policies that address roadway safety and emergency access and implementation of the City's standards and specifications that address transportation and circulation safety will ensure that potential hazards with a design feature (which includes site access) are reduced to a less than significant level. No revision to the Draft EIR is necessary.

LETTER 2

Gmail

Beth Thompson <bthompson@denovoplanning.com>

Housing Element EIR Comment

Sarah Bontrager <sbontrager@elkgrovecity.org> Wed, Jan 8, 2014 at 3:55 PM
To: "Beth Thompson (bthompson@denovoplanning.com)" <bthompson@denovoplanning.com>

A man called me today to make a comment related to the EIR and the Laguna West sites. He stated that he didn't think the EIR adequately considered the wildlife impacts to the Laguna West lakes. These lakes attract a lot of birds and are not fenced off, so more people in the area could have a negative impact on the birds 2-1

Thanks,

Sarah Bontrager

Housing Program Manager

City of Elk Grove

8401 Laguna Palms Way

Elk Grove, CA 95758

916.627.3309 (office)

916.860.3606 (mobile)

916.627.4900 (fax)

www.elkgrovecity.org

information with other City of Elk Grove departments or agencies in order to respond to your request. In some circumstances we also may be required by law to disclose information in accordance with the California Public Records Act or other legal requirements

Letter 2 Resident

Response 2-1: The commentor stated that the Draft EIR did not adequately consider the wildlife impacts to the Laguna West lakes which attract a lot of birds and are not fenced off so more people in the area could have a negative impact on the birds. The Draft EIR addresses potential impacts to special-status species and sensitive habitats in Section 3.3, Biological Resources, of the Draft EIR. New housing development is not expected to directly impact birds using water bodies in Laguna West because development would not occur within the limits of the water body. There will be the possibility of indirect impacts on birds in this location as a result of new housing in the area. New housing would add more people to the area, which would increase the number of people using the lakes for passive recreation. The lakes are located in an urbanized area and birds and wildlife using the lakes are exposed to human interaction. Any additional people associated with the Project using the lakes and surrounding area for passive recreation are not expected to result in significant disturbance to birds using the water bodies in Laguna West.

LETTER 3

Gmail

Beth Thompson <bthompson@denovoplanning.com>

FW: Housing Element Draft EIR Comments
1 message

Sarah Bontrager <sbontrager@elkgrovecity.org> Wed, Jan 8, 2014 at 3:42 PM
To: "Beth Thompson (bthompson@denovoplanning.com)" <bthompson@denovoplanning.com>

FYI

From: Randy [mailto:randyswright2@hotmail.com]
Sent: Wednesday, January 08, 2014 3:41 PM
To: Sarah Bontrager
Subject: Housing Element Draft EIR Comments
Importance: High

Dear Sarah Bontrager,

I would like to provide the following comments about the Elk Grove Housing Element and the Draft Environmental Impact Report, specifically candidate sites C-27 and C-31 in the Laguna Lakeside area (And also candidate sites C-26 and C-10 in Stonelake and candidate sites C-6, C-13, C-14, C-28, C-29 and C-30 in Laguna West)

3-1

I live in the Laguna Lakeside Community in Elk grove and my comments are mainly focused on the Lakeside area, but apply to Laguna West and Stonelake as well since impacts of additional high-density housing in the area impacts all of us on the West side of Elk Grove collectively.

The communities on the West side of Elk grove, which include Lakeside, Laguna West and Stonelake, are all Master Planned Communities managed by HOAs that strike a good balance of homes, apartments/condos, commercial and retail. Adding high-density housing to these already planned communities will upset the balance of the area that has existed thus far.

3-2

The current ratio of homes to apartments is already high for the West side of Elk Grove and adding hundreds of high-density units and thousands of people to this small part of Elk Grove is irrational and illogical due to existing issues already faced in the area, which include a lack of public transit, additional traffic on already congested roadways/arteries/I-5 freeway, overcrowded schools and limited recreational space. The additional housing will put a further burden on already strained issues residents currently face.

After reviewing the Draft EIR, I hope the comments provided by area residents are paid close attention to as well as the comments mentioned in the Draft EIR Report under the Executive Summary on Page Es-2, which include:

- Significant impacts to Interstate 5, including operation of the mainline, interchanges, and nearby ramps
- Effects on already impacted schools
- Lack of proximity to commercial/office centers, employment, and public transportation
- Lack of Public Services
- Impact to utilities and service systems
- Economic and social effects related to blight and urban decay, including the need for increased police and fire services

3-3

Additional comments I would like to include are:

- C-27 and C-31 are in identified vernal pool areas and vernal pool fairy shrimp areas — 3-4
- C-27 and C-31 are in identified Swainson's Hawk area and within the radius of hawk occurences — 3-5
- C-27 and C-31 are very near the 100-year flood zone — 3-6
- All candidate sites on the Western side of Elk Grove (bordered by I-5 and the railroad, including C-27 and C-31) are in the Folsom and Nimbus Dam Inundation Area. All other candidate sites are not in this area — 3-7
- Addition of hundreds of units to an already unproportional amount of homes to existing multi-family housing (apartments/condos) on the west side of Elk Grove (7 existing sites near the proposed candidate sites) — 3-8

Some of the above mentioned items are discussed in the Draft EIR Report (including issues concerning C-27 and C-31) Based on my opinion and after reading the EIR Report, I believe Alternative 1, which would not adopt the Housing Element Update, is the best choice for Elk Grove and as stated in the EIR Report, the "Environmentally Superior Alternative". 3-9

Also, I echo the comments of my fellow community members who have previously provided their input, specifically pages 396 to 487 of the Draft EIR Report which discuss school impacts, traffic impacts, impact to parks/recreation facilities and worsen the existing jobs/housing imbalance for the communites of Lakeside, Laguna West, and Stonelake. In my opinion, these comments should apply to all of the candidate sites on the West side of Elk Grove, which include candidate sites C-6, C-13, C-14, C-28, C-29 and C-30 in Laguna West and C-27, C-31 in the Laguna Lakeside area and C-26, C-10 in Laguna Stonelake, as adding multi- family housing at any of these sites would have a similar effect on the area. 3-10

Thank You,

Randy Singh

By sending us an email (electronic mail message) or filling out a web form, you are sending us personal information (i.e. your name, address, email address or other information). We store this information in order to respond to or process your request or otherwise resolve the subject matter of your submission.

Certain information that you provide us is subject to disclosure under the California Public Records Act or other legal requirements. This means that if it is specifically requested by a member of the public, we are required to provide the information to the person requesting it. We may share personally identifying information with other City of Elk Grove departments or agencies in order to respond to your request. In some circumstances we also may be required by law to disclose information in accordance with the California Public Records Act or other legal requirements.

Letter 3 Randy Singh

Response 3-1: The commentor states their comments address Sites C-27 and C-31 in Laguna Lakeside, C-26 and C-10 in Stonelake, and C-6, C-13, C-14, C-28, C-29, and C-30 in Laguna West. The commentor indicates that they comments are focused on the Lakeside area but apply to Laguna West and Stonelake as well. The commentor's specific concerns are addressed in Responses 3-2 through 3-10.

Response 3-2: The commenter states that the communities on the west side of the City, including Lakeside, Laguna West, and Stonelake, are master planned communities with a good balance of homes, apartments/condos, commercial, and retail and that adding high density housing will upset the balance. The commentor states that the ratio of homes to apartments is already high for the west side of Elk Grove and adding hundreds of high-density units and thousands of people to this small part of Elk Grove is irrational and illogical due to existing issues faced in the area, including a lack of public transit, additional traffic on congested roads and I-5, overcrowded schools, and limited recreational space. While this comment does not address the adequacy of the Draft EIR, it is noted that environmental impacts associated with public transit and increased traffic are addressed in Section 3.11, Transportation and Circulation, of the Draft EIR and environmental impacts associated with public schools and recreational space are addressed in Section 3.10, Public Services and Recreation. The comment is noted for the decision-makers' consideration.

Response 3-3: The commentor hopes that comments provided by area residents are paid close attention to as well as the comments mentioned in the Draft EIR report under the Executive Summary on page ES-2. The comments listed on page ES-2 were considered in preparing the analysis in Sections 3.1 through 5.0 of the Draft EIR. Comments received in response to the Draft EIR are responded to in this Final EIR. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 3-4: The commentor states that the Sites C-27 and C-31 are in identified vernal pool and vernal pool fairy shrimp areas. While this comment is an observation and does not address the adequacy of the Draft EIR, the commentor is referred to Section 3.3 of the Draft EIR. Figure 3.3-3 of the Draft EIR identifies these sites within the occurrence areas for midvalley fairy shrimp and Northern Hardpan Vernal Pool. As described under Impact 3.3-1 of the Draft EIR , potential impacts to candidate, sensitive, or special-status species, which include vernal pool fairy shrimp, will be less than significant with adherence to applicable General Plan policies and actions, Mitigation Measures MM 4.10.1a and 4.10.1b identified in the General Plan EIR, and relevant sections of the Municipal Code. As described under Impact 3.3-2 of the Draft EIR, potential impacts to riparian habitat and sensitive natural communities, which includes vernal pool areas, will be less than significant with adherence to applicable General Plan policies and actions and Mitigation Measure MM 4.10.3 identified in the General Plan EIR. Subsequent development projects proposed on any of the opportunity sites, including Sites C-27 and C-31,

shall be required to be consistent with the General Plan, General Plan EIR, and the Municipal Code, which include the requirement for a biological resources evaluation for development projects in areas that may contain special-status species. If special-status species are present on the development project site or would be impacted by the development project, the project would be required to implement mitigation measures to reduce the impact to less than significant. Mitigation may include avoidance of the species and habitat, provision of habitat buffers, replacement or restoration of habitat, and relocation of the species. MM 4.10.3 requires no net loss of riparian habitat. No revision to the Draft EIR is necessary. The comment is noted for the decision-makers' consideration.

Response 3-5: The commentor states that Sites C-27 and C-31 are in an identified Swainson's hawk area and within the radius of hawk occurrences. It should be noted that Sites C-27 and C-31 are not within an occurrence area that is shown in Figures 3.3-3 and 3.3-4 of the Draft EIR. However, these sites are within five miles of a Swainson's hawk occurrence. The commentor is referred to Section 3.3 of the Draft EIR. As described under Impact 3.3-1 of the Draft EIR, potential impacts to candidate, sensitive, or special-status species, which include Swainson's hawk, will be less than significant with adherence to applicable General Plan policies and actions, Mitigation Measures MM 4.10.b identified in the General Plan EIR, and relevant sections of the Municipal Code. Subsequent development plans for all of the opportunity sites, including Sites C-27 and C-31, shall be required to be consistent with the General Plan, General Plan EIR, and the Municipal Code, which include the requirement for a biological resources evaluation for development projects in areas that may contain special-status species. If Swainson's hawk or its foraging habitat is present on the development project site, the project would be required to implement mitigation measures to reduce the impact to less than significant. Mitigation may include avoidance of the species and habitat, replacement or restoration of habitat, relocation of the species, and payment of Swainson's hawk habitat mitigation fees in accordance with the Municipal Code. No revision to the Draft EIR is necessary. The comment is noted for the decision-makers' consideration.

Response 3-6: The commentor states that the Sites C-27 and C-31 are near the 100-year flood zone. While this comment is an observation and does not address the adequacy of the Draft EIR, the commentor is referred to Section 3.6, Hydrology and Water Quality, of the Draft EIR. Sites C-27 and C-31 are east of the 100-year flood zone as shown on Figure 3.6-3 of the Draft EIR. As described under Impact 3.6-5 of the Draft EIR, potential impacts associated with the 100-year floodplain will be less than significant with adherence to applicable General Plan policies and actions, the City's Floodplain Management Policy, and relevant sections of the Municipal Code. Subsequent development plans for all of the opportunity sites, including Sites C-27 and C-31, shall be required to be consistent with the General Plan, General Plan EIR, and the Municipal Code, which include the requirement that new projects not result in new or increased flooding impacts on adjoining parcels upstream or downstream, that a buildable area outside the 100-year floodplain sufficient to accommodate the residence be present on every residential lot,

and that new development incorporate runoff control measures to minimize peak flows of runoff and/or implement Comprehensive Drainage Plans. No revision to the Draft EIR is necessary. The comment is noted for the decision-makers' consideration.

Response 3-7: The commentor states that all candidate sites on the western side of the City are in the Folsom and Nimbus Dam Inundation Area. While this comment is an observation and does not address the adequacy of the Draft EIR, the commentor is referred to Section 3.6, Hydrology and Water Quality, of the Draft EIR. Figure 3.6-4 of the Draft EIR identifies the Folsom and Nimbus Dam Inundation Area, which encompasses the portion of the City that is west of the railroad tracks that are west of Franklin Boulevard. As described under Impact 3.6-6 of the Draft EIR, potential impacts associated with flooding as a result of dam failure are less than significant. Regular inspection by the California Department of Water Resource Division of Safety of Dams and maintenance by dam owners ensure that the dams are kept in safe operating conditions. As such, failure of these dams is considered to have an extremely low probability of occurring. No revision to the Draft EIR is necessary. The comment is noted for the decision-makers' consideration.

Response 3-8: The commentor notes the addition of hundreds of units to an already disproportional amount of homes to existing multifamily housing on the west side of the City. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 3-9: The commentor states that some of the above-mentioned items are discussed in the Draft EIR report. The commentor states that Alternative 1, which would not adopt the Housing Element Update, is the best choice for the City and, as stated in the EIR, the environmentally superior alternative. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 3-10: The commentor echoes the comments of community members that provided their input on pages 396 to 487 of the Draft EIR (comments on the Notice of Preparation), which discusses school impacts, traffic impacts, impact to parks/recreation facilities, and the jobs/housing imbalance for the communities of Lakeside, Laguna West, and Stonelake. The commentor states that these comments should apply to all of the candidate sites on the west side of the City. The comments received in response to the Notice of Preparation were considered during preparation of the Draft EIR. The commentor is referred to Section 3.10, Public Services and Recreation, of the Draft EIR for a discussion of school and parks/recreation impacts. The commentor is referred to Section 3.11, Transportation and Circulation, of the Draft EIR for a discussion of traffic impacts. Environmental impacts related to vehicle trips associated with commuting (jobs-housing balance) include traffic impacts (see Section 3.11 of the Draft EIR), air quality impacts (see Section 3.2 of the Draft EIR), and noise (see Section 3.9 of the Draft EIR). No further response is required.

LETTER 4

Gmail

Beth Thompson <bthompson@denovoplanning.com>

FW: Rezoning of Stonelake Lots C-10, C-26, C-27, C-31

1 message

Sarah Bontrager <sbontrager@elkgrovecity.org> Fri, Jan 10, 2014 at 12:58 PM
To: "Beth Thompson (bthompson@denovoplanning.com)" <bthompson@denovoplanning.com>

EIR comments

From: Mark F. Buckman [mailto:markfbuckman@sbcglobal.net]
Sent: Thursday, January 09, 2014 3:27 PM
To: Sarah Bontrager; Frank Maita; George Murphey; rchaires@elkgrovecity.org; Fedolia Harris
Subject: Rezoning of Stonelake Lots C-10, C-26, C-27, C-31

Dear Ms. Bontrager,

I am writing about my concerns with the Planning Commission potentially recommending lots C-10, C-26, C-27, or C-31 for rezoning, transforming their zoning from commercial to high density residential. My concerns are as follows:

• Unfair Distribution of High Density Housing

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and 432 apartments, which was Stonelake's calculated fair-share of high-density housing.
432 apartments / 1,899 total dwelling units = 23% of the Stonelake housing stock!

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was to improve its inventory of high-density housing by capturing that apartment complex.

Moreover, with 111 "medium density" homes permitted for C-10 (15 per acre), we have 543 higher density units.

The need for more high-density housing arises because of growth and development in other areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply UNFAIR.

• School Impacts

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. This year, children as young as 6 years old are being bused to other schools due to overcrowding. Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student can walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts.

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

• Traffic Impacts

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions.

No traffic study was done of the Stonelake neighborhood, nor of the intersection of Elk Grove Blvd. and Maritime / Harbor point, which will be significantly impacted by the addition of another unplanned 260 units of high density housing.

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

• Overburdens Stonelake's Park and Recreation Facilities

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served.

• Worsens Elk Grove's Existing Jobs/Housing Imbalance

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work. To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs.

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component.

By contrast, rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development 'near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10 and C-26) to develop as high-density housing not only breaks the carefully balanced Stonelake master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32.

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers.

CONCLUSION

For these reasons, new high-density development should occur where the City can plan to include adequate schools, parks, streets, jobs, and public transportation, especially when the need for these additional units is being driven by new residential development.

Regards,

Mark F. Buckman, Esq.

By sending us an email (electronic mail message) or filling out a web form, you are sending us personal information (i.e. your name, address, email address or other information). We store this information in order to respond to or process your request or otherwise resolve the subject matter of your submission.

Certain information that you provide us is subject to disclosure under the California Public Records Act or other legal requirements. This means that if it is specifically requested by a member of the public, we are required to provide the information to the person requesting it. We may share personally identifying information with other City of Elk Grove departments or agencies in order to respond to your request. In some circumstances we also may be required by law to disclose information in accordance with the California

Public Records Act or other legal requirements

Letter 4 Mark F. Buckman, Esq.

Response 4: The commentor identifies concerns related to distribution of high density housing, school impacts, traffic impacts, park and recreation facility impacts, and jobs-housing balance that are also raised in Letter 7 submitted by the commentor. The commentor is referred to Responses 7-1 through 7-6, which address the commentor's concerns regarding distribution of high density housing, school impacts, traffic impacts, park and recreation facility impacts, and jobs-housing balance.

LETTER 5

Gmail

Beth Thompson <bthompson@denovoplanning.com>

FW: Comment of Draft EIR
1 message

Sarah Bontrager <sbontrager@elkgrovecity.org> Tue, Jan 28, 2014 at 8:55 AM
To: "Beth Thompson (bthompson@denovoplanning.com)" <bthompson@denovoplanning.com>

Another comment letter.

From: Sam Chang [mailto:swchang156@aol.com]
Sent: Monday, January 27, 2014 9:21 PM
To: sbontrager@elkgrovecity.org.
Subject: Comment of Draft EIR

Dear Sarah Bontrager and Elk Grove City Planning Commission,

I have been a homeowner in Laguna West since 1999, when the region was still at the incipience of development. In my nearly 15 years of residence, I have watched this region develop into the socially and economically diverse, thriving community that my child grew up in. However, Laguna West's original vision of becoming a "Live, Work, Play" urban in suburban environment continues to struggle under economic pressure and planning. Lands adjacent to the town hall originally planned for commercial use have yet to seen its promise fulfilled, our schools continue to struggle with over-enrollment while issues of housing element remain, to name a few. The residents of Laguna West understand these struggles and have lived through their impacts, and it is fair to say our investment in this community is genuine. Yet perhaps the Draft EIR, prepared by outside consultants, missed our concerns regarding school, safety, and ecological impacts attendant to rezoning and repurposing of land use for affordable housing. 5-1

The residents of this community both understand the social value of affordable housing and appreciate the richness afforded by diversity. However, Laguna West's amenities such as safe and clean walkways, parks, and open spaces, its environmental characteristics such as minimalistic vehicular passageways and eco-systems supporting threatened species such as Swainson Hawks, as well as its richly diverse population are all at a tipping point. Even without additional high-density projects, commuters already face congested traffic and overcrowded parking in the vicinity of existing multi-family units around C13 and C14. The capacity-contingent quality of our schools is also of particular worry to parents. Our intimate knowledge of this region thus instill great concern over the proposal to construct high-density low-income housing. Laguna West already serves as host to a fair number of affordable housing. In fact, Alternative 2's proposed locations in fact border the vicinity of both Section 8 homes and multi-family rental units. The addition of high density low-income units in this community will constitute a disproportionate burden on the *location*, disrupting the current balance towards the precipitation of unintended negative impacts upon existing and future residents. I therefore urge you to *reconsider* the development of additional high-density units in C13 and C14 and reject the inclusion of sites C27 through C31 in your preferred Alternative 2 of 5-2

the Draft EIR. 5-2

Thank you for your attention regarding this matter.

Sincerely,

Shihwen Chang

Jan-27-2014

9273 BAY HEAD CT.
ELK GROVE CA 95758

By sending us an email (electronic mail message) or filling out a web form, you are sending us personal information (i.e. your name, address, email address or other information). We store this information in order to respond to or process your request or otherwise resolve the subject matter of your submission.

Certain information that you provide us is subject to disclosure under the California Public Records Act or other legal requirements. This means that if it is specifically requested by a member of the public, we are required to provide the information to the person requesting it. We may share personally identifying information with other City of Elk Grove departments or agencies in order to respond to your request. In some circumstances we also may be required by law to disclose information in accordance with the California Public Records Act or other legal requirements

Letter 5 Shihwen Chang

Response 5-1: The commentor provides observations on the growth of the region. The commentor states that Laguna West's original vision of becoming a "Live, Work, Play" community struggles under economic pressure and planning, noting that commercial lands have not yet been developed and schools are overenrolled. The commentor states that perhaps the Draft EIR missed their concerns regarding school, safety, and ecological impacts associated with rezoning the [commercial] land for affordable housing. While this comment identifies that there are concerns associated with school, safety, and ecological impacts, the comment does not identify any specific concerns. Section 3.10, Public Services and Recreation, of the Draft EIR, discusses environmental impacts associated with law enforcement and school facilities. Section 3.5, Hazards and Hazardous Materials, discusses various safety-related issues. Section 3.3, Biological Resources, discusses ecological impacts associated with special-status species, sensitive natural communities, and other biological resources. No revisions to the Draft EIR are necessary and the comment is noted for the decision-makers' consideration.

Response 5-2: The commentor states that Laguna West's amenities, such as safe and clean walkways, parks, and open spaces, and environmental characteristics, such as minimalistic vehicular passage ways and eco-systems, are all at a tipping point. The commentor indicates that there is congested traffic, overcrowded parking, and capacity-contingent school quality.

The Draft EIR identifies existing traffic conditions and potential traffic impacts associated with the Project in Section 3.11, Transportation and Circulation. Table 3.11-1 identifies existing roadway conditions, which shows that Elk Grove Boulevard between Franklin Boulevard and I-5 operates at Level of Service (LOS) B or better during peak hours and that Laguna Boulevard between Franklin Boulevard and I-5 operates mainly at LOS A during peak hours, with the eastbound segment operating at LOS C during the PM peak hour. Impact 3.11-1 identifies that eight City roadway segments, SR 99, and I-5 would operate unacceptably under cumulative conditions, both with the existing General Plan land use designations and with the Project's proposed land use designations. As described under Impact 3.11-1, impacts to the State highway system are significant and unavoidable. As described under Impact 3.11-2, the Project would not substantially increase hazards due to a design feature. Roadway frontages and site access for subsequent multifamily projects would be required to be consistent with the City's improvement standards and General Plan policies related to roadway safety and emergency access. Future multifamily projects would be required to provide on-site parking and affordable projects would be required to provide parking consistent with the parking ratios established by the City, consistent with the requirements of State law.

Potential impacts to biological resources are addressed in Section 3.3 of the Draft EIR. The commentor does not identify any specific concerns with eco-systems. It should be noted that without the Project, the opportunity sites in Laguna West are designated for development and comparable impacts to biological resources would occur with or without the Project.

Project impacts on schools are discussed under Impact 3.10-4 in Section 3.10 of the Draft EIR. The Project would be required to pay school impact fees which are deemed full and complete mitigation on the provision of adequate school facilities, as required by Government Code Section 65595(h). "School facilities" means any school-related consideration relating to a school district's ability to accommodate enrollment, as defined at Government Code Section 65595(g)(3). Therefore, State law requires that the payment of the school impact fees serves as full and complete mitigation on the provision of adequate school facilities, including any school-related consideration associated with EGUSD's ability to accommodate enrollment. See Responses 7-3 and 7-4 regarding traffic, air quality, and noise impacts associated Project-related trips, including vehicle trips to and from schools. No revision to the Draft EIR is necessary related to the traffic, biological resource, and schools issues raised by the commentor.

The commentor notes that Alternative 2 housing sites border the vicinity of Section 8 homes and multifamily rental units, which causes a disproportionate burden on the location. It should be noted that the multifamily units in Laguna West are not project-based Section 8 units. While Section 8 (housing choice vouchers) may be accepted by the multifamily development, the development is not a "Section 8" development. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

The commentor urges the City to reconsider development of high-density units on Sites C-13 and C-14 and to reject the inclusion of Sites C-27 through C-31 in the preferred Alternative 2 of the Draft EIR. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

LETTER 6

Gmail

Beth Thompson <bthompson@denovoplanning.com>

FW: Comments regarding Draft EIR - Elk Grove Housing Element Update
1 message

Sarah Bontrager <sbontrager@elkgrovecity.org> Tue, Jan 28, 2014 at 1:08 PM
To: "Beth Thompson (bthompson@denovoplanning.com)" <bthompson@denovoplanning.com>

Another comment letter.

From: John Tuttle [mailto:jtuttle@4c-llc.com]
Sent: Tuesday, January 28, 2014 10:13 AM
To: Sarah Bontrager
Subject: Comments regarding Draft EIR - Elk Grove Housing Element Update

Hi Sarah,

The followirg comments are provided regarding the December 2013 DEIR for the Elk Grove Housing Element Update Report.

I have lived in my Laguna West home for nearly 15 years; moved in when the area was yet to be fully developed and still take note of the struggle to secure its identity. Live, Work, Play – the "vision" for an urban environment in a suburban setting. However, the realization of this "vision" continues to suffer from market pressures and a lack of follow thru and discipline. Consultants, professionals, and other pundits can, with impunity, put an unrealistic spin on how our future will be affected by imposing a new requirement for additional high density low income housing. 6-1

The amenities which attract residents and create pride such as parks and open spaces, safe and clean walkways, minimalistic vehicular passageways, eco-systems supporting species rarely seen in the wild such as Swanson Hawks and river otters, coupled with a richly diverse population are all at a tipping point. Our community harmoniously exists with a great blend of low, medium, and high income residents. Section 8 homes and multi-family rentals are already densely located near the proposed locations noted in Alternative 2 of the Draft EIR, adjacent to both LDR and MDR zoned dwellings. Children attending Sims and Stone Lake Elementary, Toby Johnson/Harriet Eddy Middle, and Laguna Creek/Franklin High Schools bear witness to this very eclectic and cool blend of mixed socio-economic forces every day. Your approval of additional high density low income housing in the designated sites within Laguna West will tip the delicate balance that exists today and I believe will forever negatively impact this community. I therefore urge you to reject the inclusion of sites C13 and C14 in your preferred Alternative 2 of the Draft EIR. 6-2

Best Regards,

John Tuttle, LEED® AP | 4C-llc
tel: 316.296.4844
jtuttle@4c-llc.com | www.4c4llc.com

By sending us an email (electronic mail message) or filling out a web form, you are sending us personal information (i.e. your name, address, email address or other information). We store this information in order to respond to or process your request or otherwise resolve the subject matter of your submission.

Certain information that you provide us is subject to disclosure under the California Public Records Act or other legal requirements. This means that if it is specifically requested by a member of the public, we are required to provide the information to the person requesting it. We may share personally identifying information with other City of Elk Grove departments or agencies in order to respond to your request. In some circumstances we also may be required by law to disclose information in accordance with the California Public Records Act or other legal requirements.

Letter 6 John Tuttle

Response 6-1: The commentor provides observations on the growth of the region. The commentor states that the "Live, Work, Play" vision was for an urban environment in a suburban setting. The commentor states that the realization of this vision suffers from market pressures and a lack of follow through and discipline. The commentor states that an unrealistic spin can be placed on how their future will be affected by imposing a new requirement for additional high density low income housing. This comment does not address the Draft EIR and is noted for the decision-makers' consideration.

Response 6-2: The commentor states that Laguna West's amenities, such as parks and open spaces, safe and clean walkways, minimalistic vehicular passageways and eco-systems supporting Swainson's hawks and river otters, are all at a tipping point. The commentor states that the community harmoniously existing with a great blend of low, medium, and high income residents. While this comment identifies that there are concerns associated with parks and open spaces, safe and clean walkways, minimalistic vehicular passageways, and eco-systems, the comment does not identify any specific concerns nor does the commentor specifically address the Draft EIR. Section 3.10, Public Services and Recreation, of the Draft EIR, discusses environmental impacts associated with parks and recreation facilities. Section 3.5, Hazards and Hazardous Materials, discusses various safety-related issues. Section 3.11, Transportation and Circulation, discusses impacts associated with traffic and circulation-related design issues. Section 3.3, Biological Resources, discusses ecological impacts associated with special-status species, sensitive natural communities, and other biological resources.

The commentor also states that Section 8 homes and multifamily rentals are already located near proposed locations in Alternative 2 of the Draft EIR. It should be noted that the multifamily units in Laguna West are not project-based Section 8 units. While Section 8 (housing choice vouchers) may be accepted by the multifamily development, the development is not a "Section 8" development. The commentor states their belief that the approval of additional high density low income housing on the designated sites within Laguna West will tip the delicate balance and forever negatively impact the community. The commentor urges the decision-makers to reject the inclusion of Sites C-13 and C-14 in the preferred Alternative 2. The commentor is referred to Response 8-3 regarding social and economic issues. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

LETTER 7

Gmail

Beth Thompson <bthompson@denovoplanning.com>

FW: Comments to Draft Environmental Impact Report - Elk Grove Housing Element

1 message

Sarah Bontrager <sbontrager@elkgrovecity.org> Thu, Jan 30, 2014 at 8:51 AM
To: "Beth Thompson (bthompson@denovoplanning.com)" <bthompson@denovoplanning.com>

Latest comments from Mr. Buckman. Appear to be an expansion of his previous comments.

From: Mark F. Buckman [mailto:markfbuckman@sbcglobal.net]
Sent: Wednesday, January 29, 2014 11:02 PM
To: Sarah Bontrager
Cc: Sandy Kyles; 'Jeni Buckman'; 'Ron SooHoo'; 'Ng, Shirley'; 'Dwight Zuck'; 'Felicia Miller'
Subject: Comments to Draft Environmental Impact Report - Elk Grove Housing Element

City of Elk Grove

Development Services, Planning

Attn: Sarah Bontrager, Housing Program Manager

8401 Laguna Palms Way

Elk Grove, CA 95758

E-mail: sbontrager@elkgrovecity.org

RE: Comments to Draft Environmental Impact Report

2013-2021 Housing Element (GPA 14-02)

Dear Ms. Bontrager:

My neighbors and I have comments and concerns with the Draft Environmental Impact Report for the Elk Grove Housing Element Update.

We are concerned about the potential environmental impacts that would result if the City Council were to rezone lots in the Stonelake area (lots C-10, C-26, C-27, and C-31) to require Stonelake to accept an ***additional*** share of high-density housing, in order to cover development that has occurred or will occur in other parts of the City that have not or will not include the required high-density housing component. Among other things, the City's EIR failed to properly analyze the following significant environmental impacts that would result if the City rezoned lots C-10, C-26, C-27, and C-31: 7-1

- **Unfair Distribution of High Density Housing**

Stonelake already has its fair-share of high-density housing. Stonelake was built under a Specific Plan, which serves as the planning document and rules for this community. The Specific Plan that authorized development of Stonelake included 1,467 single family residential units, and **432 apartments**, which was Stonelake's calculated fair-share of high-density housing. **432 apartments** / 1,899 total dwelling units = **23%** of the Stonelake housing stock.

Stonelake's 432 apartment complex is one of the largest and one of the highest densities in the City. When the City annexed the Stonelake area, we understand one of its stated reasons was to improve its inventory of high-density housing by capturing that apartment complex. 7-2

The need for more high-density housing arises because of growth and development in *other* areas of the City. All of the residential units permitted by the Specific Plan for Stonelake were fully built out years ago. Assigning more high-density housing to Stonelake to make up for the lack of it in development OUTSIDE of Stonelake does not represent a fair-share allocation for Stonelake.

Stonelake has fulfilled its fair-share of high-density housing from Day 1, when the Specific Plan was approved.

Asking us to accept more than our fair-share so new development approved by the City can get away with inadequate high-density housing is simply unfair.

- **School Impacts and Extra Traffic, Pollution, and Noise** 7-3

Stonelake is built around a neighborhood school, Elliott Ranch Elementary. There is also Simms Elementary and Stonelake Elementary that encompass some of the subject parcels. Because of budgetary constraints faced by Elk Grove Unified School District, Elliott Ranch was converted from a year-round track schedule to a traditional schedule. As a result, over 1000 students now attend a school site that was originally designed and planned to house no more than 600 students at a time. Already, some children of Stonelake families have to be "offloaded" – i.e., bussed – to other school sites because the school is over capacity. **This year, children as young as 6 years old are being bused to other schools due to overcrowding.** Due to overcrowding, Stonelake children have also been redistricted from the middle and high school funded by their Mello-Roos assessments, Toby Johnson Middle School and Franklin High School, to Elizabeth Pinkerton Middle School *and* Cosumnes Oaks High School. This has added more than 2 extra miles round trip to the commute from Stonelake – and virtually no student *can* walk or ride a bike to these distant schools. Thus, this adds an additional 4 miles to the daily school commute. Adding high-density units to Stonelake *will* exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts. 7-3

As such, any new high-density housing should be located closer to schools that can accommodate additional students, not the impacted schools that serve Stonelake.

Although there is a statute that provides that requiring school funding mitigates the lack of a school, there are two problems with this: 1) there simply is no land upon which to build an additional elementary school, and 2) even if the lack of a school can be excused, the extra traffic, pollution, and noise necessitated by many more children commuting to distant elementary, middle, and high schools must be analyzed. However, the EIR failed to analyze these factors

- **Cumulative Traffic Impacts - Lack of Specific Studies**

Due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 a.m. EGUSD provides no transportation for the vast majority of students, E-Tran does not have a convenient route to take Stonelake children to and from Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available. Thus, in addition to the Elliott Ranch traffic, there is significant morning traffic from the Stonelake neighborhood to Pinkerton/Cosumnes Oaks. Stonelake is built out and there is no way to improve the local streets in this neighborhood to alleviate the significant over-capacity situation. A new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day. Because the local streets in this neighborhood are already so overburdened, any additional traffic generated by a new high-density residential development would cause significant direct and cumulative impacts, and the City would be creating unsafe traffic conditions. 7-4

Also, there are inadequate job opportunities in the Stonelake area, and there is no effective public transportation serving Stonelake that could take these new residents to job sites, or even to the grocery store. This means that the new residents will also generate increased traffic on their way to and from work, the store, and the like.

There was no traffic study conducted of the Stonelake neighborhood and streets or the neighborhood and streets around lots C-27 and C-31 as part of the Housing Element EIR. There was no sudy done of the intersections of Elk Grove Blvd. and Maritime, or W. Taron, or E. Taron. Our elementary school's enrollment has increased by 50-75 students this year. Additionally, other soccer leagues, Rugby leagues, and football and baseball teams have started to use our local field at Don Nottoli Park, which is right next to the school. These changes have increased traffic. Other changes that have increased traffic is the mass migration going to middle and high schools, due in part to lack of bus service / public transit to same. So, any previous traffic studies are probably outdated and inaccurate. I previously brought this matter to your attention. However, no study was conducted to make sure that cumulative impacts are captured, such as by making sure that it's done during soccer season, when school is in session, etc. 7-4

Another complicating factor is some parents are driving their children in to our school from outside the neighborhood (I think because it's highly rated), which then has over impacted the school with too many students Thus, other parents that actually live in our neighborhood have to drive their children out of the neighborhood to attend elementary school. This is addition to virtually everyone in our neighborhood driving several miles for middle and high schools due to a recent redrawing of district boundaries that moved those schools farther from our neighborhood.

Thus, the EIR should have addressed the cumulative impacts on traffic that could result from rezoning lots C-10, C-26, C-27, and C-31.

- **Overburdens Stonelake's Park and Recreation Facilities**

Stonelake is already built out and there are no sites to develop additional parks. High-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The addition of high-density development in this neighborhood will therefore strain our existing parks and result in parks that are inadequate for the number of residents to be served. However, the EIR did not analyze or address these concerns. 7-5

- **Worsens Elk Grove's Existing Jobs/Housing Imbalance**

Elk Grove currently functions as a bedroom community, and most of its residents commute to other cities to work To improve the local economy and traffic, and to meet the City's obligations under AB 32 to reduce greenhouse gas emissions caused by its development patterns, Elk Grove MUST create local jobs. 7-6

The Specific Plan that authorized Stonelake called for the development of two lots as "Limited Commercial," which is "designed to foster low intensity neighborhood-oriented commercial development adjacent to, integrated within, or at the entrance to residential neighborhoods." This was part of a carefully balanced development plan that sought to include a jobs component as well as a housing component. Lots C-27 and C-31 are similarly zoned and could be re-zoned to high density residential.

Rezoning these lots to high-density residential (typically apartments or condos) violates the City's desire to have such high-density development "near commercial or office centers or near light industrial uses or other centers of employment."

Allowing the commercial/retail sites (e.g., sites C-10, C-26, C-27, and C-31) to develop as high-density housing not only *breaks* the carefully balanced master plan, it removes potential jobs from the city and replaces them with more job seekers. This only worsens the City's job-housing imbalance and traffic patterns, and it makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32. 7-6

As such, any new high-density housing should be located closer to job opportunities and commercial or office centers that can accommodate additional job seekers. However, the EIR did not contain adequate consideration of these concerns, nor of the cumulative impacts of the rezoning on greenhouse gas emissions and jobs / housing balance.

- **No Viable Alternative to the City's Preferred Plan Was Considered**

The EIR did not present any viable alternative to the city's preferred plan. Other than the selected alternative, the only other alternatives were no project and an illegal / non-conforming project. That does not present a real choice.

7-7

As an example, one alternative would be to site the new high density housing in the newly developing areas of the city. Most of the new housing development projected in Elk Grove is not in-fill, but rather in green fields. That alternative would have less environmental impacts because the city could adequately plan for the high density development as part of a master plan. The only alternative in the EIR requires changing zoning of existing master-planned communities and proposes to put high-density housing where it was never planned to be. Also, the city could have done the EIR and process well before the deadline, instead of waiting until the last minute and then saying that the city will be penalized if the city council does not adopt the only option presented in the EIR.

Thank you for including these comments in the record of administrative proceedings for this matter. I look forward to reviewing the City's responses to these comments in the final EIR.

Regards,

Mark F. Buckman

9988 Bobbell Court

Elk Grove, CA 95757

Phone: (916) 442-8300

Letter 7 Mark F. Buckman

Response 7-1: The commentor states that he and his neighbors have comments and concerns with potential environmental impacts that would result with the Project's proposed rezone of Sites C-10, C-26, C-27, and C-31. The commentor indicates that the Draft EIR fails to analyze significant environmental impacts. Each environmental impact identified by the commentor is addressed below in Responses 7-2 through 7-7.

Response 7-2: The commentor states that Stonelake already has its fair share of high density housing and provides information in support of this assertion. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 7-3: The commentor states that Stonelake is built around a neighborhood school (Elliott Ranch Elementary) and that Simms Elementary and Stonelake Elementary encompass some of the subject parcels. The commentor indicates that Elliott Ranch has over 1,000 students and the facility was designed and planned to house no more than 600 students at a time. The commentor also states that some children of Stonelake families have to be "offloaded" or bussed to other school sites because the school is over capacity. The commentor states that Stonelake children have been redistricted from Toby Johnson Middle School and Franklin High School to Elizabeth Pinkerton Middle School and Cosumnes Oaks High School. The commentor states that this adds 4 miles to the daily school commute and that virtually no student can walk or ride a bike to these distance schools. The commentor states that adding high-density units to Stonelake will exacerbate the existing overcrowding problems and result in significant direct and cumulative school impacts. The commentor states that although there is a statute that provides for school funding to mitigate school issues, there is no land upon which to build an additional elementary school and the extra traffic, pollution, and noise necessitated by the commute to distant elementary, middle, and high schools must be analyzed. It is noted that schools built outside of Laguna West address EGUSD-wide capacity issues and help to relieve overload issues throughout EGUSD.

Project impacts on schools are discussed under Impact 3.10-4 in Section 3.10 of the Draft EIR. The Project would be required to pay school impact fees which are deemed full and complete mitigation on the provision of adequate school facilities, as required by Government Code Section 65595(h). "School facilities" means any school-related consideration relating to a school district's ability to accommodate enrollment, as defined at Government Code Section 65595(g)(3). Therefore, State law requires that the payment of the school impact fees serves as full and complete mitigation on the provision of adequate school facilities, including any school-related consideration associated with EGUSD's ability to accommodate enrollment. No revision to the Draft EIR is necessary related to analysis of impacts associated with school facilities. While the definition of school facility, "any school-related consideration relating to a school district's ability to accommodate enrollment", could be construed to include vehicle trips to

and from school as a "school-related consideration", the traffic analysis prepared for the Project includes school-related trips as part of the overall trip generation figure.

The Project would result in new residential development that would generate additional vehicle trips. The Project would change the General Plan land use designation of candidate sites C-10, C-26, and C-31 from commercial to high density residential and would change candidate site C-27 from light industry to high density residential. Consequently, the shift from more intensive to less intensive land uses would result in fewer vehicle trips being generated. The following compares the expected trip generation of candidate sites C-10, C-26, C-27, and C-31 for daily, AM peak hour, and PM peak hour conditions with the current general plan land use designation to the Project.

TABLE 1: TRIP GENERATION COMPARISON: SITES C-10, C-26, C-27, AND C-31

LAND USE DESIGNATION	DAILY	AM PEAK HOUR	PM PEAK HOUR
Current General Plan	10,640	470	1,040
Proposed Project	4,140	290	360
Difference (Current General Plan – Proposed Project)	*- 6,500*	*- 180*	*- 680*

While the Project would result in lower trip generation for these sites , it is acknowledged that the change in General Plan land use designation of Sites C-10, C-26, C-27, and C-31 would increase the potential student population, which could increase travel to/from local schools. The Draft EIR accounts for the interaction of the Project and elementary, middle, and high schools, through the use of a travel demand forecasting model. As outlined in the DEIR, traffic volume forecasts for the transportation impact analysis were developed using a modified version of the Sacramento Area Council of Governments (SACOG) 2035 MTP/SCS travel demand forecasting model. The travel demand forecasting model accounts for the interaction of trips produced by households and attracted to non-residential land uses, like schools, office buildings, shopping centers, park and recreation facilities, etc. The likelihood of a trip occurring between a household and school depends on the location of the school and the school enrollment. Most school trips will be shorter distance trips. However, the travel demand model does not assume that school trips remain within a specific neighborhood. For example, an elementary school trip generated in Site C-10, C-26, C-27, or C-31 would not be assigned by the travel demand model to a school in east Elk Grove, since there are elementary schools much closer (e.g., Stone Lake and Elliot Ranch). However, for the travel demand model, the likelihood of a trip occurring between Site C-10, C-26, C-27, and C-31 and theses schools would be nearly identical. This interaction is consistent with Elk Grove Unified School District policy, which is discussed in Impact 3.10-5, which addresses the Project's potential impact to schools facilities. As discussed in Impact 3.10-5, the Elk Grove Unified School District, does not

guarantee any student attendance at a particular school, regardless of where the student lives. In addition, school boundaries are subject to change periodically in response to school enrollment levels (e.g., overcrowding), as school facilities are constructed, and as population age or otherwise change. Consequently, it is speculative to identify the exact school a potential student generated by a household in Site C-10, C-26, C-27, or C-31 may attend.

As described above, the transportation impact analysis prepared for the Project accounted for vehicle trips generated by the Project, which includes vehicle travel associated with employment, school, shopping, and other residential-based trips. The air quality analysis prepared for the Project addressed air quality impacts associated with Project-generated vehicle trips, including school-related trips. The commentor is referred to Impact 3.2-2, which addresses air pollutant emissions associated with Project operations, including vehicle trips (mobile sources), in Section 3.2 of the Draft EIR. As described under Impact 3.2-2, the Project would generate up to 58,240 daily vehicle trips. Mobile source emissions associated with these trips would result in maximum daily emissions of 477.9 pounds of reactive organic gases (ROG), 379.1 pounds of nitrogen oxides, 194.7 pounds of particulate matter 10 microns or smaller, and 55.3 pounds of particulate matter smaller than 2.5 microns during the winter months. These mobile source emissions, combined with area and energy source emissions, generated by the Project would exceed the threshold of significance for ROG and NOx. The Draft EIR identifies Mitigation Measure 3.2-1 to reduce Project-generated emissions. However, even with implementation of mitigation, the Project would exceed adopted thresholds and result in a significant and unavoidable impact. As discussed under Impact 4.2 in Section 4.0 of the Draft EIR, the Project would have a cumulatively considerable contribution to significant and unavoidable impacts to regional air quality.

The noise impact analysis prepared for the Project addressed noise associated with Project-generated vehicle trips, which include school-related trips. As described under Impact 3.8-1 in Section 3.8 of the Draft EIR, the Project would result in an increase in roadway noise on roadways throughout the City. However, as shown in Table 3.8-6, the noise increase associated with the Project would be approximately 0.1 dB or less and will not significantly increase noise levels. Noise impacts associated with the Project would be less than significant. As described under Impact 3.8-6, the Project would have a less than cumulatively considerable contribution to noise levels.

No revision to the Draft EIR is necessary to address this comment.

Response 7-4: The commentor states that due to the number of students being driven to Elliott Ranch, Stonelake streets are already well over capacity and unsafe in the morning hours until about 8:00 am. The commentor states that EGUSD provides no transportation for the vast majority of students (it is noted that the commentor stated in Comment 7-3 that students were being bused to other schools due to overcrowding), that e-Tran does not have a convenient route to Pinkerton/Cosumnes Oaks, and there are no trails or safe bike paths available, resulting in

significant morning traffic from Stonelake to Pinkerton/Cosumnes Oaks. It is noted that the City does not provide school bus service; however, e-trans regularly updates routes based on user demand. The commentor states that a new high-density residential development would further strain this system because those residents would be traveling to the same places at the same times of day and that additional traffic would cause significant direct and cumulative impacts and unsafe traffic conditions. The commentor also states that there are inadequate job opportunities in the Stonelake area, no effective public transportation serving Stonelake, and that new residents will generate increased traffic on their way to and from work and the store. The commentor indicates that there was no traffic study conducted of the Stonelake neighborhood and the area around Sites C-27 and C-31, including the intersections of Elk Grove Boulevard and Maritime, W. Taron, or E. Taron. The commentor also identifies traffic associated with park use by various sports teams.

The Draft EIR analyzes impacts of the Project on the City's transportation system with cumulative development in the City of Elk Grove and regionally. At this stage, traffic analysis was conducted at the programmatic level. As individual projects are proposed, impacts associated with each specific project will be addressed in accordance with the City's Traffic Impact Study Guidelines, based on the specific design of the project. As outlined in Section 3.10 of the Draft EIR, cumulative scenario traffic volume forecasts for the transportation impact analysis were developed using a modified version of the SACOG 2035 MTP/SCS travel demand forecasting model. The travel demand forecasting model reflects build out development levels in the City of Elk Grove, including development in the Southeast Policy Area, with year 2035 levels of development outside the City. No revision to the Draft EIR is necessary.

Response 7-5: The commentor states that Stonelake is built out and there are no sites to develop additional parks. The commentor opines that high-density development tends to generate disproportionate demand for outside parks and recreation due to the very small lot sizes. The commentor states that high-density development will strain the existing parks and result in parks that are inadequate for the number of residents to be served and that the EIR did not analyze or address these concerns. The commentor is referred to Section 3.10 of the Draft EIR, Public Services and Recreation. Specifically, Impact 3.10-3 identifies that the Project would result approximately 8,843 multi-family residential units, an increase of 4,875 more housing units than accommodated by the General Plan, and that the increase in development density and intensity on the opportunity sites (which include the sites identified by the commentor) could result in impacts to parks and recreation facilities not discussed in previous General Plan environmental documents. New multifamily development is required to provide for its fair-share of parks through land dedication, in-lieu fees, or on-site improvements, as required by General Plan Policy PTO-4. New multifamily development in the Stonelake area would be required to pay the Stonelake Park Fee (identified on Table 3.10-6 of the Draft EIR), which would be used to fund park facilities that would serve the Stonelake community and would provide for parks and recreation facilities to serve the new development. In addition, the

City's Design Guidelines and Title 22 of the Municipal Code require multifamily development to designate a portion of the project as common open space. Specifically, the Design Guidelines require that multifamily developments designate a minimum of 25 percent of the gross development area as common open space that is centrally located and not comprised of undeveloped remnants of the site. Although multifamily units may not have individual yards or may have small private yards, this common open space provides amenities that also serve the recreation and open space needs of the multifamily uses. Amenities that count toward common open space requirements include tot lot/play structure, community garden, picnic tables/BBQ areas, swimming pool, indoor recreation facility, sports court, natural open space areas, and other active or passive recreation areas meeting the intent of the Design Guidelines. Implementation of the City's General Plan policies and actions applicable to parks and recreation would reduce potential park impacts to less than significant and the Project would not result in significant environmental impacts on existing parks and recreation facilities. No revision to the Draft EIR is necessary.

Response 7-6: The commentor states that the City is a bedroom community, that most residents commute to other cities to work, and that to meet the City's obligations under AB 32 to reduce greenhouse gas emissions, the City must create local jobs. The commentor indicates that rezoning Sites C-27 and C-31 violates the City's desire to have high-density development near commercial or office centers or near light industrial uses or other centers of employment. The commentor states that removing potential jobs and replacing them with more job seekers worsens the City's jobs-housing imbalance and traffic patterns and makes it impossible for the City to reduce greenhouse gas emissions as it is required to do under AB 32. The commentor states that any new high-density housing should be located closer to job opportunities and commercial or office centers. The commentor concludes that the Draft EIR did not adequately consider these concerns nor the cumulative impacts of the rezoning on greenhouse gas emissions and jobs/housing balance.

The Draft EIR does address environmental impacts associated with commute patterns, including traffic, noise, air quality, and greenhouse gas emissions. The traffic analysis in the Draft EIR addresses trips that would be generated by the Project, including work-related trips. The commentor is referred to Response 7-3 for a discussion of traffic, noise, and air quality impacts associated with vehicle trips, which include worker commute trips as well as school-related trips, that would be generated by the Project.

The Draft EIR analyzes impacts associated with greenhouse gas emissions in Section 3.4. As described under Impact 3.4-1, the Project would accommodate up to 8,843 multifamily housing units and that the increase in grown would exceed the growth projections used in the greenhouse gas quantifications prepared for the City's Climate Action Plan (CAP). Subsequent multifamily development projects would be required to comply with the greenhouse gas reduction measures established by the City's CAP, including measures to increase energy

efficiency of new construction, waste reduction measures, improvements for pedestrian and bicycle travel, and water conservation, as required by Mitigation Measure 3.4-1. Implementation of the Project would result in 63,122.44 unmitigated carbon dioxide equivalent (CO2e) tons per year and, with implementation of mitigation, 43,976.72 CO2e tons per year. The increase in greenhouse gas emissions associated with the Project would be significant and unavoidable, as described under Impact 3.4-1, and would be cumulatively considerable.

The Draft EIR has adequately disclosed potential traffic, air quality, noise, and greenhouse gas emissions impacts that would result from the Project and no revision is necessary.

Response 7-7: The commentor states that no viable alternative to the City's preferred plan was considered. The commentor recommends an alternative to site the new high density housing in the newly developing areas of the City so the City could adequately plan for the high density development as part of a master plan. The commentor also states that the City could have prepared the Draft EIR and gone through the process earlier.

The Draft EIR analyzed three alternatives to the Project: Alternative 1 (No Project), Alternative 2 (Reduced Sites Alternative), and Alternative 3 (Affordable Housing Overlay Alternative), as described in Section 5.0 of the Draft EIR. The Draft EIR also considered and rejected from further analysis a reduced density alternative, an alternative that would only accommodate 2,954 units, and an alternative sites alternative as these alternatives would either not meet the Project's objectives or would not avoid or substantially reduce the significant impacts associated with the Project.

The Project does include sites for multifamily housing in newly developing areas, as suggested by the commentor. Specifically, Sites 2, 3, 4, 5, 6, C-12, C-18, C19, C-20, and C-41 are located in undeveloped or developing areas. However, there are limited areas that have not been master planned or previously entitled for development to place new multifamily housing as suggested by the commentor. Further, the Project cannot rely solely on sites in newly developing areas that do not have infrastructure and that require additional approvals (master plan, specific plan, etc.) as reliance solely on these sites may not be considered adequate by HCD due to the governmental and non-governmental constraints associated with planning and infrastructure financing and thus may likely not result in a certified Housing Element, thereby not meeting the Project objectives.

LETTER 8

Gmail

Beth Thompson <bthompson@denovoplanning.com>

FW: Additional impact of high density homes at Laguna West

1 message

Sarah Bontrager <sbontrager@elkgrovecity.org> Fri, Jan 31, 2014 at 8:55 AM
To: "Beth Thompson (bthompson@denovoplanning.com)" <bthompson@denovoplanning.com>

FYI

From: Laikun Wong [mailto:lai_kunwong@yahoo.com]
Sent: Thursday, January 30, 2014 11:24 PM
To: Sarah Bontrager
Cc: James Cooper; gdauis@elkgrovecity.org; Steve Detrick
Subject: Additional impact of high density homes at Laguna West

Dear Ms. Bontrager,

I had no intention of writing to you to address the potential impact that would result if the City decides to add more high density housing in my neighborhood- Laguna West. I wasn't happy even though I learned from the last public hearing that the EIR reccommended Alternative 2 that would remove 5 lots from rezoning to RD 25. I thought that since C13 and C14 were designated as RD 25, there wasn't any chance that the City would change that label.The low or very low income homes will be here sooner or later.

Today I got a letter from Laguna West Association. It is a notice of Violation of Governing Documents of Laguna West Assciation.The accusation is that my trash container was visible from outside. I must attend a hearing and provide evidence of correction, or have a legal adviser to represent me in the hearing, or pay a fine. I realize that we, as residents of Laguna West, are being watched very closely from time to time by our association to make sure that we all have to follow our CC&Rs. The rules are very strict. We are not happy about that. But that may be the only way to keep our community clean, well-maintained and safe.

8-1

Lot C13, and lot C14 are about 5 minutes walk to some very nice and huge homes that have palm trees in the back yard that goes to the lake. Many of these 3, 4, and 5 thousand feet homes have private dock to park their boats and a swimming pool as well. How would a kid from these high density homes think when he/she walks by these beautiful homes. Would these homes motivate them to work harder at school. Would these homes motivate them to realize the American dream. I really don't know. I don't own any one of these nice homes. But I do feel that there will be a lot of uneasiness and even tension between the two socially and economically different groups of residents who have to share the lakes, the parks, the streets, the church, the

8-2

school, and many more...and they live so close to each other...My wife and I had lived in the low income homes before we immigrated to the U.S. We understand that there is a housing need for the low income people. But mixing families earning $20,000 with families earning $200,000 may create more conflict than harmony in our community. 8-2

The EIR includes many physical data that suggest that there is hardly any adverse impact to our community with the exception of increased traffic, potential increase of air polutants, and loud noice. TIhe report does not include any social, economical, and pychological impact to our neighbors. Many of them, like me, have never learned that we have two empty lots that are designated as RD25. We paid a premium for our home because it has the lakes.We paid a premium in our property tax because it is a newly developed region. We pay the home owners association fee to maintain the lakes. I do hope that our City manager could also pay a little more attention to our request not to include C13, and C14 in your consideration. 8-3

Thank you.

Laikun Wong

2904 W Laguna Court

Letter 8 Laikun Wong

Response 8-1: The commentor provides their reasoning for submitting comments on the Draft EIR. The commentor identifies that they received a Notice of Violation of Governing Documents of Laguna West Association and being watched closely by their association ensures that they follow their CC&Rs, which may be the only way to keep their community clean, well-maintained, and safe. Safety issues are addressed in Section 3.5, Hazards and Water Quality, and Section 3.10, Public Services and Recreation, of the Draft EIR. This comment does not identify any specific issues associated with the adequacy of the Draft EIR. The commentor's specific concerns are addressed Responses 8-2 through 8-3.

Response 8-2: The commentor states Sites C-13 and C-14 are about a five minute walk from some large, nice homes. The commentor is concerned that what children from high-density housing may think when walking by these large, nice homes. The commentor is concerned that there may be uneasiness, tension, and conflict between the two socially and economically different groups of residents who have to share the lakes, the parks, the streets, the church, et school, etc. The commentor once lived in low income housing and recognizes the need for housing for low income people. This comment speculates regarding social and economic issues that do not affect the physical environment. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 8-3: The commentor states that Draft EIR includes physical data that suggests that there is hardly any adverse impact to their community with the exception of increased traffic, potential increase of air pollutants, and loud noise. The commentor states that the report does not include any social, economical, and psychological impact to their neighbors, many of whom (like the commentor) paid a premium for their home by the lakes and pay a premium in property taxes. The commentor requests that the City Manager would pay a little more attention to their request to not include Sites C-13 and C-14.

Section 15131 of the CEQA Guidelines provides the following guidance regarding addressing social and economic effects:

"Economic or social information may be included in an EIR or may be presented in whatever form the agency desires.

(a) Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes."

The potential for unease between neighbors due to a difference in economic and/or social status would not result in any significant adverse effects on the physical environment and,

therefore, this issue is not addressed in the EIR, consistent with the requirements of the CEQA Guidelines. Potential environmental issues associated with land use conflicts are addressed in Section 3.7, Land Use Planning, of the Draft EIR. Potential environmental issues associated with law enforcement services are addressed in Section 3.10, Public Services and Recreation, of the Draft EIR. The commentor does not identify any concerns with the analysis in the Draft EIR other than social and economic issues and does not identify any physical effects on the environment that were not adequately addressed in the EIR. No revision to the Draft EIR is necessary and the comment is noted for the decision-makers' consideration.

Transcript of Public Comments

Planning Commission Hearing on January 9, 2014

Vasili Stratton: Good evening Council. Thank you for hearing me tonight. I'd like to comment on two parcels that I am the owner of, off of Elk Grove Blvd. and I-5. Would be C-10 and C-26 and in regards to C-10, I'd like to support staffs recommendations for its proposed designation. In regards to C-26 I'd like to ask that the Council allow that piece be rezoned to RD-10 and it's currently proposed for RD-15. (At this point there was an interjection as Mr. Stratton had mixed up his parcels. The Commission had to sort out the confusion).

Doug Yoakam: Thank you Mr. Chairman. I am Doug Yoakam 8738 Gladiola Way. I'm directly over the fence as of proposed site C-23. I understand the problem you're dealing with here and....but with the many options you have I suggest that C-23 is not appropriate to include in your low income inventory. These lots are privately owned by long time owners who, as far as I know, do not wish to have their land developed for high density, designated it as multi-family is not realistic in that case it won't result in development of actual affordable housing. The entire site is surrounded by single family homes, making it inappropriate for multi-family zone. Increasing zoning to multi-family is contrary to the expectations of all of us who move there over the past 20 years. I moved in 18 years ago and was told about the current AR-5 behind my property at.....on these large lots, which was a designation made by the county, prior to Elk Grove becoming a City. Resuming land directly behind my house will lower my home value significantly right at the time that we are seeing our home values recovering, after this recession. As I said I understand the problem you're dealing with, I happen to be a consultant at the State level, I'm not...I'm not at HCD, I swear to God! I'm at the Legislative side. And lucky for you and lucky for us you have many large adequate sites, along east Stockton, Bruceville and Sheldon road to designate for future affordable housing. Many of these sites are near existing multi-family developments and have buffers between them and the existing single family homes. Thank you for the opportunity to testify, please don't put C-23 on your list.

Dwight Zuck: Declined

Kathy Engle: Thank you for listening to our concerns. I just wanted to say I live in the Stonelake development and my main concern is with the schools. We have had since we've lived here, 11 years, we have had traditional, non-traditional, traditional, year-long back to traditional now it looks like they're going to go back to yearlong...we have a terrible problem with traffic getting to the middle schools, high schools, which we have been, the Stonelake has been particularly bounced around with the different..they were at one school, I think when we moved in, 11 years ago, then they went to Franklin, now...now it's Pinkerton and..... that's, just, it...I think children need consistency, I'm a child advocate and I just think that the schools are already so far a away and children need to feel like they're a part of the community and when we keep moving these boundaries due to these kinds of things we....the children don't make their friends that aren't in their same schools, and I just hope that you really take into consideration the kids because they don't get to come here and talk to you the other thing is, I didn't receive anything in the mail, that somebody....that she was talking about....that we were

Response to Comments Received at the January 9, 2014 Planning Commission Meeting

Response to Planning Commission Meeting Comments: Comments provided at the Planning Commission meeting identified general concerns associated with schools, traffic, crime, social and economic issues associated with low income and/or high density housing, and preferences for sites that should not be included in the Project. None of the comments made at the Planning Commission addressed any section or specific analysis provided in the Draft EIR and did not address the adequacy of the Draft EIR. The general concerns raised by the commentors are responded to as follows:

Crime: Section 3.10, Public Services and Recreation, of the Draft EIR addresses potential physical impacts on the environment associated with law enforcement services. Impact 3.10-1 on pages 3.10-15 and 3.10-16 identifies the increased demand for police staffing that would occur as a result of the Project and that the impact on the environment would be less than significant. Subsequent multifamily projects would be required to comply with the City's policies and requirements related to police services as described under Impact 3.10-1.

Traffic: Section 3.11, Transportation and Circulation, of the Draft EIR addresses potential environmental impacts associated with traffic. Impact 3.11-1 on pages 3.11-3 through 3.11-35 identifies potential impacts to roadways and freeways that could occur with implementation of the Project. Potential traffic hazards associated with design features of future multifamily projects are discussed under Impact 3.11-2 on page 3.11-5 of the Draft EIR. Potential impacts associated with public transit, pedestrian, and bicycle facilities are discussed under Impact 3.11-3 on page 3.11-35 of the Draft EIR. Please see Response 7-3 and 7-4 regarding for a impacts associated with school-related traffic, site-specific traffic impact analysis associated with future multifamily projects, cumulative traffic impacts, and traffic impacts and resulting air and noise impacts that would result from Project traffic, including traffic resulting from trips to and from schools and trips to and from work. Please see Response 7-6 regarding impacts associated with jobs-housing balance and commute-related trips.

Social and Economic Issues: Please see Response 8-3 regarding social and economic issues. No social and economic issues have been identified in association with a potential physical effect on the environment and, thus, do not need to be addressed in the Draft EIR.

Schools: Schools are discussed in Section 3.10, Public Services and Recreation, of the Draft EIR. Impact 3.10-4 of the Draft EIR discusses potential environmental effects associated with schools and concludes that the impact would be less than significant.. Please see Response to Letter C regarding school capacity, Response 5-2 regarding school capacity and discussion of school impacts, and Responses 7-3 and 7-4 regarding traffic, air quality, and noise impacts associated school-related trips.

all supposed to get, that we were supposed to have public comments, I don't know if everybody else did...and...I think that's all....thank you.

Mike Guttridge: Mike Guttridge, I've... been in Elk Grove for quite some time and we've owned our piece property of which is...I think C-36, it's on East Stockton Blvd. It's about 4 acres, it's right by our shopping center that we sold some time ago, which we are still trying to, especially now, with the configuration of the new freeway....exit coming around by our property. I'd like to...to try to keep it zoned commercial, or highway commercial, general commercial. We've got some interest on the property now as the economy changes, and I think at this point and time especially as you know, we've built quite a few homes in Elk Grove who always feel like it's important to not be quite right on the freeway and off of the freeway with any kind of residential. I'd appreciate it if we could get, again, zoned commercial, general commercial or limited commercial. Now she didn't bring up C-36, so I didn't know exactly what that meant. At this point I'm still... what's my zone at this point? Limited commercial...thank you very much.

Judy Rodacker Thank you for listening to our concerns...I don't know the numbers but I can give you the area that I'm concerned about. I live at 8759 Bottlebrush Court and we are close to the Sheldon area that you're talking about changing the zoning on, and we object to having the zoning changed to a higher density because it will lower our cost...our housing values, and it will cause us economic problems. I just wanted to voice my concerns and say that I wanted to object to the zoning change.

Jenifer Miller: Hi thank you for listening to us. I have a question because you did not mention mine which was C-39, so is that not being changed and what is it right now? Because I got a letter that I was within 500 feet...(no further comments not being rezoned.)

Bruce Walters: Mr. Chairman, Commissioners, Bruce Walters, representing Frank Stathos who owns property designated as C-32. It's a site on the north side of Elk Grove Blvd. west of Bruceville. Franks has owned the property for over ten years, it's the old Foulks Ranch home site, Frank worked 2005 to 2006 to relocate the historic house down to the Franklin area with the intent to, ultimate plans to develop that property as single family residential which is consistent with the current General Plan designation on the property. I am here to say that we are opposed the proposed zoning as recommended by staff, I've provided written comments to staff and I think they were included in the staff report, citing reasons that we believe support not zoning the property. Just to be brief, basically what we conclude is that zoning this property will essentially render it undevelopable as multi-family residential. It makes sense to use the property with the adjacent parcel to the north, and develop it as single family residential as it is currently designated in the general plan. I will note that consistent with that long term intent with the property owner we have recently filed an application for development of RD-5 for site C-32, which again is consistent with the general plan and consistent with the long term intent of this property owner. Those are comments, if you have any questions.

Shirly Ng: I think the first gentleman that came in....My name is Shirly Ng, and I live in the Stonelake area, and I think the first gentleman that came earlier that was talking about C-10 and C-26, I think you've answered that question where I think you're considering that being rezoned to RD-15 and RD-10 is that correct? So my only other concern are C-27 and C-31 which is in the Lakeside area those are also pieces that you're considering for possibly the low income and I'd like to say that at the Stonelake area, although it's really close to Highway 5, public transportation there is very, very limited, so I'm thinking if you're going to have public

transportation....I'm sorry, low income housing there I don't know if you're planning to do anything about it, but as the public transportation is limited, I can see that this would create more traffic, I can also see that as the other person that said before, this would create...possibly more children in the schools that are already filled today. I am opposed to the rezoning of C27- and C-31 for low income.

Ryan Hooper: Good evening Chair Maita and members of the Commission, Ryan Hooper with the law offices of Gregory Thatch here this evening representing both the Laguna West Association as well as Sheldon Farms. With respect to Laguna West we are very pleased, as you know with the staff recommendation, in that regard, we had a lot of concerns initially with respect to impacts associated with converting all that office and commercial to high density residential. The EIR confirmed those concerns and we thought it was very appropriate that staff removed those properties from its list of proposed candidate sites for the Housing Element update and we ask that you would support that prudent decision when making your recommendation this evening. But with respect to Sheldon Farms, site 41, we have some concern. We don't necessarily oppose the Housing Element update, or staff's recommendation, provided a couple of modifications are imposed and I think it would help to understand a little bit about LU-40, Land Use Element 40. It was more or less the result of the last Housing Element update. What it sought to do, was to accommodate future high density, on the Sheldon farms property, but with a range between 10 and 15%, or 10 and 15 acres, pardon me, for the 95 acre parcel that, property, that comprises Sheldon Farms. That was a deal that was struck between the City and our client. What's happened now, is staff has come forward with a modification to LU-40 and what it does with respect to the acreage is it changes it from that range to a minimum of that 15 acres and I think it speaks to Commissioner Chaires comment regarding massing and over concentration when you take the maximum densities and you look at 15 or more, that's a lot, its roughly 50% more than the low range ten acres that was originally embodied in the LU-40. So what we would recommend very specifically is that we go back to what was agreed to, the 10-15 acres. Additionally we have concerns relative to the timing. Staff has proposed a two to three year timing for the rezoning and we just think that that is not good planning, this is a very unique opportunity for the City to get it right. This is 95 acres of vacant property a lot of neat things can happen there, but we need to preserve that opportunity and that's what we're asking you to do and not tie our hands with respect to timing. Our clients would very much like to sell that property at the appropriate time. They're land owners, not developers, its better suited for a developer to plan that and we think it's best not to tie the hands of our land owner and the developer and don't tie the hands of the City, because I think that what's good today may not be good tomorrow and we should wait for the right time to do that. So with that, I would simply ask that we not have the timing requirement imposed on site C-41. With that I would entertain any questions you have, I submitted a letter yesterday with redlines that reflect the modifications that I just requested.

Michael Grill: How you doing? I live off of Crocus Court and when I moved in there, there was not going to be any apartments, or whatever put in that area, that area is C-23 and I just don't think its right to change things down the road. I understand you guys gotta make these places available, but if you've really got a master plan, you plan them and you let the people know before they move in what they're going to get. It's going to hurt my home value, I live....with by the way the bird flies, I live within 500 feet of that place, I never got any notice, I found out by one of the people in my neighborhood, they didn't get the notice, they heard it from someone else. It wasn't zoned that way when I moved in, why change it? If it was your neighborhood,

would you want to change your zoning? I'm pretty sure you don't...you know something like this will make me move and I'm sure there's other people that will move and I don't think that's right for you to put me on this. If you go and you buy a car, let's say it's a ....Toyota, and later on they tell you, you should have got a Yugo, you're not going to like that, well, don't change my car. Thank you.

Ron SooHoo: Good evening, thank you for having me here tonight. My name is Ron SooHoo, I'm the President of the Stonelake Homeowners Association, in light of what I've learned today from Mr. Stratton, and from your staff, my presentation is going to be a lot shorter. I just want....we did mail you a letter, and it's in your package, stating our opposition to the rezoning of C-10 and C-26. Again my long presentation is not applicable anymore; I'll just close with saying that the Board does oppose any rezoning that would bring high density housing to those two parcels, parcels C-10 and C-26. Thank you.

Thomas Roeser: Thank you on behalf of everyone here for a chance to have a head of household, father, and concerned citizen have just a few minutes of your time. I'm here to express objection to the candidacy being placed around, what I believe I am seeing being labeled as C-22 that would be the candidacy property who has a west of Vytina Drive location. It's of paramount importance for me, just to express myself in that....I've unfortunately inherited a home next door that has recently changed hands with a recent downturn in the economy. A foreign investor purchased the home and we now have a Section 8 situation living next door. It's had...by the way I'm on 8626 Schubert Court, it's had nothing but a constant barrage of police calls, police cars, not just seeming like on a daily basis, but often multiple times during the day. My concern is not so much property values; yes that's of concern, I have two young children and most unfortunately they had to witness a very, very violent crime act right out smack in front of our home. So my concern is that Section 8 housing, or any housing or zoning which would incorporate such behavior that seems to be unfortunately indigenous to such socioeconomic status, so my concern is not just for property home values... I wanted to have my two children to come up here, but it's past their bedtime, to express what it was like to actually witness a constant barrage of police calls and seeing a potential murder happen right at their door step. So we have very grave concerns over, just not the property values, but the potential for safety for the neighborhood that we live in. I object for the candidacy of C-23.

Nirmal Saini: Thank you Chairman and members of the Commission. Thank you for giving me the opportunity to speak. I live within 500 feet of the C-23 and I have been living there for 20 years. When I moved in there I checked the zoning, I checked what was going to be built around there, and there was no plan for any multi-family homes there and that is when I had decided to live there. And like everybody else I have the right to live in an area I want to live in. Now as the Chairman has suggested, for future zoning, if you zone it like that, so people who are moving there who already know what is the zone, and know that they're making their decisions. I made my decision 20 years ago, it is going to have an impact on me right now, and that is why I object to that. Not only that, there is no grocery store at a walking distance; people who are in the low income strata, they like to walk to the grocery store, there is no grocery store at a walking distance. There is no entertainment place, no movie theater anything at walking distance. There is not even a park at a walking distance, which is of a good size, for their kids to walk to and play. So I think this is not a good site and I strongly object to that.

George Carpenter: Good evening Mr. Chairman, members of the Commission, my name is George Carpenter, I'm VP of Winn Communities and I'm here on two parcels; parcels C-40 and I support staffs recommendations on that, if you were to go against the recommendation I'd like to come back and address you on that particular property, but I'm really here on site 7-A, it's approximately a ten acre parcel on East Stockton Blvd., south of Sheldon Road and I submitted a letter to you at the beginning of the week identifying my opposition to that. I've been before this Commission and the Council a number of times on this particular property its, I've been working on it personally for about nine years trying to get it built out and it's got a number of constraints that I've had to battle through, initially the interchange was undersized to develop this area as commercial we own the property right across the street. We have a total of 16 acres and we haven't been able to develop it originally because that interchange was undersized, the City with Caltrans spent about $60 million and built a beautiful brand new interchange their and so our parcel, parcels have great access and great visibility there. But also there were constraints with, there's a detention basin that serves the Sheldon Pacific subdivision adjacent to it and part the sites also in the flood plain from White House Creek and there were improvements that were supposed to be done as part of the lower Laguna Creek Master Plan that the City had permits and plans to do, and those improvements were never done and so over the last couple of years we figured out another way to solve the drainage and the flood, the flooding issues, and I was just recently before the Council in September of last year, and we got approval to move the detention basin off of the property, and so with the economy changing we've started to get some interest in that site and every time we have a potential buyer they always ask us about the big piles of dirt and the detention basin and we were almost there this year, we couldn't quite get the plans approved before the winter months came and surprisingly no rain now, but we plan to start going after grading that site in March and we think it's going to be a really good commercial site. It's in good shape, it's got great visibility for traffic northbound on 99, it's one of the last few potential retail sites as you leave the City of Elk Grove for retail sales tax capture, so after all the work we have put into it we'd ask if the Commission would tell the Council to take this off the list, it really makes sense as a commercial site. We were involved with Kohl's when they came to this region about ten years ago and we provided two of the five sites that they built on and we think there is going to be another retailer to come into this area and that's is going to be the perfect location for them and so we'd really like the opportunity to continue working on this property and that you not rezone it.

Mark Buckman: Hi, good evening. I'm Mark Buckman, I've been a resident of Stonelake for a little over ten years with my family and I wanted to talk about my opposition to lot C-10, 26, 27 and 31 being rezoned. I understand 26 is not really on the list, or part of staff's recommendations, so that's not really necessary. Also C-10, from what Mr. Stratton said, he would like it zoned RD-10 and my understanding was staff was not including the proposed RD-15 zoning in the Housing Element so it wouldn't hurt it in any way, so I would drop any opposition to C-10. I would also like to thank staff and especially Sarah has been really responsive and really good at communicating and did a great presentation tonight to tell everybody what this is all about. I know it's a requirement of state law that we have multi-family housing not many people are up here speaking in support of it, there's not developers beating down your doors to build it and I know it has to happen, the rezoning. But we need to put, the high density housing, where the need for it is being created; that's in the green fields, the undeveloped areas, not in the already developed areas. For example, in Stonelake, we were already developed under a specific plan. We had a mix of market rate residential, we have apartments, we have 432

apartments, one of the biggest apartment complexes in the City, and we also had our commercial element, however because the economy has been bad, our commercial element hasn't been built out. And if you rezone it, or rezone the lots across the street to high density residential, you change our potential jobs housing balance; you add more houses and take away more jobs. It's doubly bad for us. And we've already built our fair share of high density housing, we already have it. And so I think it would be unfair to put it on Stonelake or other areas in the west, another person asked me to speak for them and they said "you know why don't you tell them a little about the kind of fairness as far as the proximity of where the high density is", and you kind of look at the map and imagine you're playing like Monopoly and somebody's built up a bunch of hotels all the color of the high rent district as far as where all the big lots are, down the west side, that's the part of the board you wouldn't want to hit, and I think that's kind of an unfair balance and I think that's what they're talking about. I think where you could put some of that is in the larger green fields area maybe the South East Planning Area, the places that are creating the demand, because what is driving the need for high density housing is brand new development. Stonelake has none of that; since the last Housing Element in 2008, Stonelake hasn't built a single house, we are not creating the demand, we have met our requirement. And in our schools, somebody else already talked about it. We don't have any more land to build houses, to build more schools and we are already over impacted. We were originally going to Franklin and Johnson, that changed last year, so now all of our families drive by Franklin and Johnson to go to Pinkerton and Cosumnes Oaks. If you put more high density there, you're adding kids to an over impacted elementary school that's already offloading, and they're traveling beyond existing schools to go there. I guess it's really that I think you need to locate the high density housing in the area that's causing the need for high density and that's not in Stonelake, it's in the newer green field areas that are going to be developed over the eight year planning period.

Ingo Muller: Good evening Council, I live at Maritime Estates and I have a couple of things. It mostly affects parcel C27 and C-31 and firstly I am the only one of my neighbors who actually got the letter that about this meeting today. I talked to four of my neighbors at a New Years Eve party, none of them had gotten the letter, which I find very strange and since Maritime Estates is a planned community and I would hope that everyone in the planned community would get the information from the staff, because building more multi-family housing in the area affects everyone in the Maritime Estates, not just me. Secondly, we have already multifamily housing north of us; we don't need more multifamily housing to the south of us, we really don't. Since McDonalds has opened there at the corner of Elk Grove and Harbor, the pollution with drinking cups, McDonalds bags and other crap has increased dramatically to what it was before. Before it was like every time there was a really strong wind, garbage has been blown over, now the environment, the neighborhood, looks like crap pretty much within two weeks of cleaning up and I think the Commission needs to take that in to consideration. One more thing, instead of attracting businesses like Wal-Mart, that only pays on average minimum wage, why doesn't Elk Grove attract the businesses like Whole Foods? Who pays their employees substantially more and therefore reduces the need for low income housing. I think there is something principally wrong in the planning for Elk Grove. That's all.

Tobr Tonoian: I have a couple of things. Number one: I live right behind Vytina, but out of the 500...feet I guess, but I live on Tegea Way, and that is, I don't know if you're familiar with that street, and I live right on the corner of Tegea Way and Shasta Lilly. Down at the end of my street, is also Shasta Lilly and Tegea Way. My street is exactly through the circle. When they built

it, and they were going to open up the circle, they should've thought number 1: we ought to make this street wider cause it's a short cut; and so my concern is number one: that I live in the area, never got one letter, and my street is already impacted with the park and with people coming home and going to work; because it's a short cut. Now, Michael is just one house over, from my street. So it would up here (hand motion) and down my street. So anything that you build that's going to be a high density, it's going to be a lot more traffic, and my street can't even handle what's on it now and I think Elk Grove should look into that. They've got the bumps on the street and as soon as they pass over those bumps they speed anyways, you know, but these people don't want these bumps so they're going down my street and....so that's my concern. I think that we are, our street is already compacted with way more traffic than what was meant to be on it, and it's a narrow street, it's not meant for two cars going by. And now if you're going to build apartments, or whatever you're going to build there, those people are going to be coming from Calvine down Shasta Lilly zigzagging down my street to go to Vytina. And so...that's my concern.

Jay Thomas: Good evening everybody. My name is Jay Thomas I also live on Vytina, *I mean* Tegea Way, my opposal is to C-23, for... reasons...that seems like an awfully high density area and its....really in the middle of the housing units, safety issues, we are also trying to get speed bumps put on Tegea Way just for the issues that she mentioned. I have two kids that play out front, five and eight and I can't let them play out there without parking my car as a barrier just from speeding, or people texting while driving. My car was hit in front of my house and totaled, one night, just parked on the street, in front of my house. That raises concern about the traffic and everything else. That is a busy intersection at Vytina and Sheldon. If you were to put high density housing in there, I feel it would be a safety hazard as well. I don't think it's well suited for that much traffic also.

Brian Wilhite: Good evening and thank you for allowing me to speak. My name is Brian Wilhite I'm representing the Carlton Plaza of Elk Grove which is right smack in the middle of two proposed areas, C-25 and C-32. By the way Ms. Chaires thank you very much for noticing that on the map of not wanting to create a zone because of the way these are laid out. I am the resident liaison and social worker there at the Carlton Plaza and I am the voice of the residents and their families and I want to bring that voice to the committee tonight that in our opinion to rezone and allow low income and high density housing right next to where the seniors, your grandparents or your parents are wanting to live out the rest of their lives, I think is ridiculous. Because to build our community we had to pay and put in the third lane because it increased traffic and the increase in traffic will just get more from there. Also there is the concern for vandalism and other assorted *things*. I've been a social worker for 15 years, I'm very familiar with working with Section 8, that is not the bed of roses that people want to make it *sound* like and to think that low income housing would be suited there because of being next to the Nugget Market, or Trader Joes. I'd like to say, first I'd like to thank you for doing the demographic of income. You've reminded me of how low a social worker with a Masters degree really is on the totem pole. The point is, I do have a Masters degree and I can't afford to shop at the Nugget, or at Trader Joes and so it would look great on a brochure, for somebody to move in next to the Nugget, but my opinion is they'd have to go many miles away to Winco to do their shopping. I don't think it is an advantage to have low income housing in such a wonderful, beautiful area, I agree with some of the other comments of let's look at the outlying areas where low income housing would be better suited. Lets don't bring in these zones and lets don't create these neighborhoods that we would rather not have for our families and our grandparents to live in

and I just wanted to point out that you mentioned that you weren't sure of the Citrus Heights population and when I lived there 30 years ago, it was 40,000 people, the census in 2012 its 87,000 and so it's probably over 90,000 by now, so if you want to use that comparison of their allotment vs. ours. Again thank you for the opportunity.

Sam Prasad: To the Planning Committee. I wanted to share concerns regarding proposal zone change to the empty lot C-23 which is to the back of my current home. I currently reside at 8714 Gladiola Way property that I currently purchased and moved into February 2013. Before this property my residence was the nearly developed estates D & D properties by 24th and Florin which I purchased the newly built home back in 1993. Through the course of the years I lived there as the area was developed and it went through various of its own changes. There was an empty lot behind my backyard, similar to the current residence. The zoning was changed and then the addition track homes were built behind my house and along with the community park, Steve Jones Park, next to my house that was on the corner of Casa Linda Court. In addition another proposal for zone change came for low income apartments to be built on the northeast corner of 24th and Meadowview. The zone changes were approved and the low income apartments were built. And as the time progressed, the crime rate increased significantly. There were drug activities daily, actually across as well as in the park next to my residence. There were constant burglaries, robberies including two houses across from us at gun point. During the course of the years, before the zoning changes I had remodeled my home doing additional extensions, spending close to $75,000 on my house without a vision of ever seeing a zone change occur in the future. This house, even today is a large, the most beautiful large house that stands on the corner. However in an area, that nobody wants to be associated with anymore due to all the crime activities. While my residence at this property, and as zone changes occurred, our family witnessed significant increases in crimes due to these crime activities we did not allow our children to play outside, or go to the park, that they were deprived of being able to play outside while growing up in a wonderful neighborhood as any child would want to. It is a childhood dream to have a park with a playground next to their house and being able to go to it and play freely. Feeling unsafe in the neighborhood and for the protection of my family aside from being burglarized, even during with our protection, even while our house alarm was monitored, I even had bars and security doors installed, on each of my doors and windows making it feel like we were living in jail. Most of the neighbors that were original owners of the property eventually moved due to crimes, renting their properties only making the environment worse. Finally after putting my life savings into the house along with my heart and soul, after 20 years, both, me and my wife, decided to move to another neighborhood where we continue to raise our children and not be concerned about an environment of crime and feeling unsafe. And before even purchasing this house that I live on now, I did do a zoning check that was the C-23. I intend to retire, continue to raise my children, along with our future grandchildren and not have them deprived of going back to the same environment we came from. My current house on Gladiola has a beautiful swimming pool where if zone changes were allowed it would deprive us of having to be able to enjoy the privacy of our backyard along with the unnecessary crime. We are proud of our current neighbors and our neighborhood along with feeling security, to leave our cars parked outside or even going for a walk or bike ride. This is why we feel strongly opposed to going back to an environment we just came from and have witnessed and lived through it. We are totally opposed to zone changes and any potential low income housing from being built in the future. Thank you.

Cindy Morus: Commissioners thank you for letting me speak tonight. I too live near section 23 at 8623 Mystras Circle. I have several points, that I would like to reiterate some of which that have already been made. One, overall that is a small piece of property, it's surrounded by single family homes and Sheldon. High density would not be compatible with the neighborhood; there is already too much traffic there, which has been said. What hasn't been said is that there is an elementary school within just a block of that and so a lot of traffic coming in and out of that would impact that school which also is full. So very few more children can be added to that school. And so traffic in that area, coming up and down that street and cutting though on Tegea, because that would get them quickly to Calvine, this subdivision is supported by Sheldon and Calvine, and you can cut through it, and so this traffic would really impact the children that are walking to school. The children that would come to this area would not be able to go to this school. And finally, again, in terms of crime, we know high density does increase crime in the neighborhood and we already were victims of pot growing houses approximately six or seven houses were busted in our neighborhood in early December, so we already have issues there...with crime. Thank you.

Lai Kun Wong: Good evening. Thank you for giving me the chance to speak. Coming from Hong Kong 17 years ago, I feel I almost complete the American Dream. And my dream is to live in a safe place which is Laguna West; I've been living there for about 16 to 17 years and I love that place, but unfortunately, when we look at the map, I don't know why this is such a high concentration of density home in that... right in the heart of Laguna West. Thank you, Nancy for pointing that out, why, you know...and when you look at the other location of the multifamily home, you can see that everyone with separate by quite a distance; but not Laguna West, I was wondering why they picked a well developed place to put in so many. I'm not against low income homes, me and my have been living in low income homes in Hong Kong for many years, but we need to be fair and fair is you don't need to put all of this into just one area. Alright, thank you very much.

Steve Chamberlain: Thank you Chairman, members of the Commission. My name is Steve Chamberlain and I own property at 8679 Sheldon Road, Site 23. There's a number of folks that were here tonight that had to leave, and some of them asked me to have them raise their hands to show how many of them are here for site 23...you received I think, in the mail, or I think the planning department made copies of the petition 579 signatures, we've got another, little over another hundred coming tomorrow, and also the crime report from the affordable project on Elk Grove/Florin, obviously everybody has the same issues: drop in property value in their home, crime, and the thing I'm a little surprised and here in the planning department tonight, they've recommended just the west side of C-23, but the traffic and the school and the safety of the kids, I'm very surprised that they're allowing that to go forward. Vytina is already a very busy street, with the school there and the high density coming in would just exacerbate that problem. But I think the biggest thing that I heard from my neighbors when we had our little neighborhood meeting was, they just didn't feel that it was right that the City could come in and change the zoning. When they go to look to buy their house, where do my kids go to school, who are my neighbors? And they feel like you're pulling the carpet right out from underneath them, when you come in and change the zoning to have affordable housing come in next to probably, for most of them, the biggest investment they'll ever make, to come in and change that zoning...I mean I heard it over and over that they just don't feel it's right and that's why we've got 579 signatures and I'm sure if it wasn't during the holidays it would've been well over a thousand. We've got a lot people out collecting signatures and we are going

to continue to collect signatures cause it just doesn't feel right that you can change that on the people and there has been no conversation at all about the compensation for the property owners that you're looking to rezone, because apartment land has got zero value. So you're going to crush the little property owners that have these properties and that hasn't been discussed at all, if this does go through, how do those people get compensated for subsidizing for all the affordable housing, so that....that's surprising to me, we need to have some sort of discussion too, but the biggest thing is the safety, and then pulling out the value from these home owners, but thank you for your time.

Fayez Boulos: Ok., I'm Fayez Boulos, I own the property over there on Vytina and Sheldon. I came to CA in 1965. I'm a barber and I worked forever to by buy a little piece of property and build a house on it for my family, to raise my family over there. Now do I have any say in about that zoning things? I mean what I have here, some people like yourself, cause rezone that piece of property without the person who pay for it? I mean why are we staying here? I paid for the property and I pay taxes on it, I have since 78. I build my house to raise my family on it and I live on there; it's fair to bring low income and put them behind my property, the one I pay for without my approval? I'm living on it, if it's going to be sold, it's going to be sold according to the rest of the people who live around there, they pay a lot of money for their homes. Now it's not that big of a thing, its six acres, or whatever they are, but this property is made for my family to live on. If the time come, let's see we are going to sell, or we are going to rezone, or whatever, we will rezone it according to the neighborhood, why do we have to do low income things on it? I mean, it's up to you guys...

Paul Boulos: Fayez, Mr. Boulos is my dad, I'm his son, and my name is Paul Boulos, I grew up on that property its 1823....I would like to say, you're talking about rezoning the property to a low income housing and we've heard some other speakers speaking about the value decrease. You know my dad's owned his own business all of his life, some of us that work in the public sector, or in the private sector have retirement plans and things like that. He bought this property as an investment and you say that it's not eminent domain, and that it's not going to be taken over, but he's 78 years old, and if at some point he decides "I need to sell this property to sustain my life", going forward by rezoning to low income housing you're taking that away from him, so essentially you're taking away his retirement because you've changed the value of his property based on the zoning. And that's my big concern, you're not bringing somebody in and saying we're taking your and we are building on it, but you're taking away his ability to sell that land at its current value. So that's my concern.

Gurpreet Singh : Thank you very much for letting me speak, even though I didn't fill out the form earlier, my name is Gurpreet Singh and I live on 8780 Vytina Drive. They're going to rezone it, but have they done any traffic studies on that area or not? They're going to bring in so many houses, I mean again to say whether they're going to come in or not...but let's say they come in. have they done any traffic studies in that area? Have they gone there during the school time? When even for me living there to back up and come out of my home is difficult, because people are trying to go to their offices, and from the other side of the Sheldon, people are trying to bring their kids in to school. Alright, if you're going to make new schools, where are you going to make a new school in that area? Do you have enough space in that school there, Raymond Kays, to have more classes, do you have enough parking available in that area? Have you ever gone there in the school drop off time and the pickup time, to see how much confusion is there? How we parents have a difficult time because of the school was so much

over crowded, I had to take my son out of that school, because it was getting very hard. I drive down to West Sacramento to take my son to school there, to a charter school. Yes, one reason was too many students here, that was the main reason and if more will come, what's going to happen? Schools will build up, how many years later? What's going to happen to the school, to the little kids that are going to school right now, or in the past, in the next eight years, the kid that is going to be born today, or in the next two three years, is going to be going to that school. And see what the impact is going to be and see the traffic impact think about the people crossing over to the parks. The park which we have already there, has got some crime activities. Some people from outside, from Calvine from all those low income, high density, you know those apartments, they come down there; I have stopped sending my kids to that park. So hopefully you will reconsider that and I totally oppose changing the zoning of that piece of property. Thank you very much.

Andre: I live in Laguna West, and from what I've heard, I've been here since the beginning, outside, is that Laguna West is not on to be rezoned to be built with the high density, low income, was that correct? Well I would like to suggest changing it from multi family, low income then because if you look on the map, like you said, Nancy, you made a great point, somebody already reiterated that earlier, if you look on the map, Laguna West is a beautiful, master plan community. You have the couple lakes, and I don't believe it's fair that I need to work my tail off, to put my kids in a beautiful neighborhood, to go to a nice school, which actually is overcrowded already, and people are getting, you should see the traffic coming down Babson, down my street, and I knew that when I bought the house, so I'm ok with that I knew that when I bought the house, but the traffic coming down Babson from people coming in from other areas to go to this school which is all year round, four traps, now if you were to even think about putting more housing in that neighborhood, and how lucky would they be to be right by a lake, how lucky! I'm not right by the lake. My wife works her tail off, I work my tail off my mother-in-law helps us to do whatever we can to give our kids a better life. You look on that map its going to be all colored all on the left hand side of all multi family, high density, low income housing. I also agree with the need for it, but quick question, if someone can answer this: how did they come up with that number? Is there a way, the number of homes that we need to build "quote un-quote" is there a way we can petition that to whoever gives us that number? Why do we have to build 3,400 homes? Usually you can always petition something right? I mean someone on death row, you can go in, and they petition for forty years right? I've heard of Folsom getting in trouble for not doing enough of low income housing. Folsom is also a very beautiful place to live, right. Irvine, form what I hear, Elk Grove is tailored after Irvine, is that true? I've heard someone who helped to master plan Irvine, helped to master plan Elk Grove. Ok Irvine is one of the safest cities to live in the country and a beautiful city. I myself don't care if we get in trouble for not putting enough low income, high density housing. We have a 150,000 people right...in this City, how big do we want to get? How many homes do we want to build? That's just my point, I think there's plenty enough and I agree with what another gentleman said earlier that in the new communities, build them into them, that way people know what they're going to get into.

Felicia Miller: I've been a ten plus year resident of Stonelake. Thank you for allowing a late comment, I didn't fill out a card but....but I will. There's a couple of points that I don't think that were clarified enough, so I just want to take the opportunity to point out the additional things that I think the Commission needs to consider when they make their decision. I want to thank staff for reconsidering C-10 and C-26 in Stonelake, thank you very much, I really appreciate

that, however I do want to point out C-27 and C-31 parcels in Laguna West. I'm opposed to high density housing being built on those parcels, myself as well as a number of other residents in Stonelake believe that there is disproportionate amount of high density housing being slated for Laguna West. Most of the subdivisions in Laguna West have been built out, the remaining parcels there have been slated for commercial use and I'm concerned about in-filling them with housing as once housing is in there, we will forever lose the opportunity for commercial use that was part of that master plan once these communities were put together, so I'd like you to reconsider that. One of the other things nobody has really hit upon is I've been working with your traffic director, for the City of Elk Grove for the last four years about traffic emptying out of West Laguna, specifically traffic dumping on to Elk Grove Blvd., as well as Laguna, onto those I-5 off ramps. I'm really grateful Caltrans spent the money to add the additional lansing upgrades, but getting in and out of those subdivisions during peak traffic is hell. Additional high density housing will add additional traffic in and out of West Laguna and Stonelake. Surface streets and the onramps will not accommodate the kind of traffic that we are talking about, which will result in high density housing. So I know there is a traffic impact component on the EIR, but I just want to point that out to you. Traffic's horrible now, it will be unbearable with additional housing. The other thing I'm concerned about, which if I am understanding correctly, the purpose of the meeting was to hear the recommendation by staff and to take public comment, and if I understand correctly, the Commission is considering taking the recommendation to a vote this evening, is that true? I would ask that you consider to defer voting. The public comment period doesn't end until the 30th of January and I think it's part of public process to allow the additional two and a half weeks for residents of the City of Elk Grove to continue the public comment before the Commission entertains a vote to staff's recommendation. Thank you for the opportunity.

Dwight Zuck: I'll have been a resident of Elk Grove going on my 13th year, I moved up here from the East Bay, like most people when they move to a new area they vet different properties, different areas around Sacramento, we did that, from Folsom to Natomas to down to here. My wife's from the area, across the river and my kids at that time were two and five years old, they're now teenagers going in the middle of high school here in Elk Grove, we are very thankful for that. My wife's a teacher at Elk Grove Elementary School right in the neighborhood of Stonelake, right where I am a resident. We vetted the area, we vetted the builders within the neighborhood, we chose that neighborhood, we knew at the time that it was zoned for commercial and somewhere along the line they want to say "oh, we are going to change that on you and then after we vet the area, and the builders, we come down and we say "we're going to make a big investment here, we are going to finance the property here. At the time I think we $450,000 for that house. It went down for a while, and then it's come back to some degree, the point is, you've gone and done a game changer on us. And you know you wake up one morning and you hear potentially high density housing coming in, we already have, Mr. Buckman pointed out, 422 units that were apartments that got changed into Section 8, I go out early in the morning every day and I pick up trash, bags of McDonalds, you know contents, right in the entrance of East Taron Road, right into that neighborhood. I stop my pick up, and I put those bags in my truck and I take them home and I dump them. We don't need any more of that. My wife's a teacher in a very overcrowded school at the third grade level, she's been...primary so that's K-3, she's got bused in students now, from other areas that are just driving down the rest of the class room. You've got 32 people in those classrooms now. It's unbearable. She's a very good teacher. She's a 25 year master credential teacher in the State of California. she's spent more time at this because she's got to deal with these students that

are coming from other areas. More of this type of construction is high density...Sir am I boring you? You're, you're, you're not listening to what we are saying here. More of this is just going to make things worse, its already bad. The values will go down anywhere from 20 to 25% and so will your taxes. That come into the City, as a result of that, our neighborhood, should you proceed with either of those, the north side of Elk Grove Blvd., in West...C-27, C-31 on the north side or C-10, C-26 on the Stonelake side. I don't think you people are thinking this all the way through. And yes, like Mr. Buckman said, put it in the areas that are being developed, than the separate locations. You know the South Eastern and you can put your names, or let the City Council members put their names on the parts over there, but we've got what we bargained for, right now. Please, please you don't want to wake up one morning Mr. Maita and find out that they're putting Section 8 next to your house. You didn't bargain for that and I'm sure you'd build a buffer zone around your own property, hopefully, but then they have something called eminent domain if that's what you're distinguishing, or you're not distinguishing, you've confused a lot of people when you said that Ms. Chaires, I didn't think it was, cause it's not a freeway, it's not necessarily an obligatory thing and I agree with the gentleman who said about the City of Irvine, it's beautiful down there. So just think if you woke up one day and found out that this was happening to you and the neighborhood that you vetted out over 15 years ago and you know they're changing the game on you...I don't think so, let's be realistic here, and I know you have a job to do but please, think about the people that took their time to get here and don't jeopardize the people that don't really care to be there.

Revisions made to the Draft EIR are identified below. None of the revisions identify new significant environmental impacts, nor do any of the revisions result in substantive changes to the Draft EIR.

Page 2.0-4 and 2.0-5 of the Draft EIR are revised as follows:

"HOUSING PROGRAM

Chapter 1 of the Housing Element establishes the City's housing program, which includes goals, policies, and actions to address the City's housing needs. The City's Housing Goals are described above Project Objectives. The policies support achievement of the Housing Goals. Revisions to the Housing Program include updates to the goals, policies, and actions. Policy LU-6 will be revised as follows:

> LU-6 – Multi-family housing development should be located according to the general criteria outlined in policy H-3 Action 1.

The actions established in Chapter 1 are specific steps that the City will take to address its housing needs. These actions are identified below. The majority of actions in the Housing Element commit the City to continuing to encourage the provision of affordable housing and housing appropriate for special needs groups and to encourage the maintenance of existing housing. The actions included in the Housing Element would not change the potential location of development, increase the intensity of development, or result in development that is not consistent with the growth allowed under the City's General Plan. However, the changes in land use designations and rezoning described below under Housing Sites will result in land use changes that could have an effect on the environment."

Page 3.10-5 of the Draft EIR is revised as follows:

"SCHOOLS

All of the Housing Element sites fall within the service area of the Elk Grove Unified School District (EGUSD). The District covers nearly 320 square miles and has been in existence for over 54~~41~~ years. The EGUSD boundaries encompass the entire City, portions of the City of Sacramento, and most of southern Sacramento County. The EGUSD stretches from the Sacramento River to the foothills of Amador County, and is bisected from east to west by the Cosumnes River and north to south by State Route 99 and Interstate 5. Due to constant increases in population, the Elk Grove Unified School District must change its school boundaries on a regular basis.

The Elk Grove Unified School District is the 5~~12~~th largest school district in California~~ and one of the fastest growing school districts in the nation~~. More than sixty percent of the District's students are on a four-track year-round schedule and attend school for three months and are off for a month. For the 2012-13 school year, the district will serve more than 62,000 students (EGUSD 2013a). The district has 64 schools: 39 elementary schools, nine middle schools, nine high schools, four alternative education schools, an adult school, a special education school, one virtual academy and one charter school (EGUSD 2013a). The EGUSD adopted an amended Facilities Master Plan in February 2002, which identified major issues and detailed information on the District's future school needs, funding options, and cost estimates."

Page 3.10-20 of the Draft EIR is revised as follows:

"According to the 2013 School Facilities Need Analysis, the current student (2013/14) enrollment exceeds EGUSD capacity for elementary and SDC Severe school facilities. Additionally, the excess capacity in the middle and high school grades would not be able to absorb the projected number of new students residing

in the 42 opportunity sites in existing EGUSD facilities. Based on this, new school sites would need to be constructed for future residents of the 42 housing sites. EGUSD has identified nine elementary schools, two high/middle schools and two alternative high schools have the potential for initial planning or construction within the next five ~~planned to accommodate anticipated future growth in the District~~ (EGUSD 2013, Appendix B-5). The planning for these schools did not anticipate development of multifamily housing on the opportunity sites in excess of the multifamily developed allowed under the existing General Plan land use designations."

The heading for Table 3.11-2 on pages 3.11-7 through 3.11-13 2.0-4 of the Draft EIR is revised as follows:

TABLE 3.11-2: PEAK HOUR ROADWAY SEGMENT OPERATIONS – EXISTING CONDITIONS

ID	DIREC-TION	ROADWAY	FROM	TO	# OF LANES	HOURLY CAPACITY (PER LANE)	AM VOLUME	AM VOLUME TO CAPACITY	AM LOS	PMAM VOLUME	PMAM VOLUME TO CAPACITY	PMAM LOS

Exhibit C

FINDINGS REQUIRED UNDER
THE CALIFORNIA ENVIRONMENTAL QUALITY ACT
(Public Resources Code Section 21000 et seq.)

For the 2013-2021 Housing Element Project
PL0018

I. INTRODUCTION

The City of Elk Grove (City), as lead agency, has prepared an Environmental Impact Report (EIR) for the Elk Grove Housing Element (Project), State Clearinghouse No. 2013082012. The EIR consists of the Draft EIR and the Final EIR. The EIR is a program-level EIR pursuant to Section 15168 of the California Environmental Quality Act (CEQA) Guidelines and analyzes the significant effects on the environment of the Project.

CEQA requires the City as the lead agency to: 1) make written findings when it approves a project for which an environmental impact report (EIR) was certified, and 2) identify overriding considerations for significant and unavoidable impacts identified in the EIR.

These findings explain how the City, as the lead agency, approached the significant and potentially significant impacts identified in the EIR prepared for the Project. The statement of overriding considerations identifies economic, social, technological, and other benefits of the Project that override any significant environmental impacts that would result from the Project.

As required under CEQA, the Final EIR describes the Project, adverse environmental impacts of the Project, and mitigation measures and alternatives that would substantially reduce or avoid those impacts. The information and conclusions contained in the EIR reflect the City's independent judgment regarding the potential adverse environmental impacts of the Project.

The Final EIR (which includes the Draft EIR, comments on the Draft EIR, responses to comments, and revisions to the Draft EIR) for the Project, examined several alternatives to the Project that were not chosen as part of the approved project (the No Project Alternative, Reduced Sites Alternative, and Affordable Housing Overlay Alternative).

The Findings and Statement of Overriding Considerations set forth below ("Findings") are presented for adoption by the City Council, as the City's findings under CEQA (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (Cal. Code Regs., Title 14, Section 15000 et seq.) relating to the Project. The Findings provide the written analysis and conclusions of this City Council regarding the Project's environmental impacts, mitigation measures, alternatives to the Project, and the overriding considerations, which in this City Council's view, justify approval of the Project, despite its environmental effects.

II. PROJECT DESCRIPTION

PROJECT LOCATION

The Project area includes the City. The City encompasses approximately 26,980 acres within Sacramento County. See Figure 2.0-1 of the Draft EIR for Project location. The City is located within the USGS 7.5 minute *Bruceville,* Buffalo Creek, Carmichael, Clarksburg, Courtland, Elk Grove, Florin, Galt, and Sloughhouse quadrangles. Elevations within the City range from sea level to approximately 150 feet above mean sea level (MSL). Plant communities within the City include agricultural cropland, annual grassland, fallow agricultural land, horticultural/landscape, irrigation ditches, irrigated pastures, open waters, perennial and seasonal marshes, riparian woodlands, seasonal wetlands, and vernal pools. Land uses throughout the City vary, including urban, rural, and open space uses. Urban land uses in the City generally consist of residential, commercial, office, recreational, and public uses.

Natural features in the area include the Stone Lakes National Wildlife Refuge, the Cosumnes River, the Sacramento River and associated tributaries (e.g., Elk Grove Creek, Deer Creek, Laguna Creek, Morrison Creek, and Whitehouse Creek), and vegetation communities consisting of valley oak woodland, annual grassland, valley foothill riparian, and agricultural lands.

OVERVIEW

The Housing Element has been prepared to respond to current and near-term future housing needs in Elk Grove, as assigned through the state's Regional Housing Needs Allocation (RHNA) process and identified in the Housing Needs Analysis presented in the Housing Element. The Housing Element contains updated information and strategic directions, including policies and specific actions, that the City is committed to undertaking to address its housing needs. The following provides a brief summary and overview of the Project. Chapter 2.0 of the Draft EIR includes a detailed description of the Project, including maps and graphics. The reader is referred to Chapter 2.0 of the Draft EIR for a more complete and thorough description of the components of the Project.

The Project would:

1. Amend the Elk Grove General Plan to update the Housing Element and revised the Land Use Map for any or all of the sites as described in Table 2.0-1 of the Draft EIR, with the exception of C-12 and C-41 which are addressed through Housing Element actions as described in Chapter 2.0 of the Draft EIR;

2. Amend Elk Grove Municipal Code (EGMC) Title 23, Zoning Code, to revise the Zoning Map to rezone any or all of the sites as described in Table 2.0-1 of the Draft EIR, with the exception of C-12 and C-41 which are addressed through Housing Element actions as described in Chapter 2.0 of the Draft EIR; and

3. Amend EGMC Title 23, Zoning Code, to modify the RD-25 zoning district to adjust the allowed density range from 20.1 to 25.0 dwelling units per acre to 20.1 to 30.0 dwelling units per acre.

PROJECT OBJECTIVES

The purpose of the Project is to address the housing needs and objectives of the City and to meet the requirements of State law. The Project includes the following goals and objectives:

Housing Element Goals

- Housing Goal 1: Provide adequate sites to accommodate the City's share of regional housing needs through appropriate zoning and development standards.
- Housing Goal 2: Assist in the development and provision of adequate housing stock to meet the needs of extremely low-, very low-, low-, and moderate-income households and special needs groups.
- Housing Goal 3: Identify and, where appropriate, remove governmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and special needs groups.
- Housing Goal 4: Conserve and improve the condition of existing affordable housing stock.
- Housing Goal 5: Promote housing opportunities for all persons, regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.
- Housing Goal 6: Preserve assisted (subsidized) housing developments for lower-income households.

Housing Element Objectives

- Maintain and enhance existing housing and blend well-designed new housing into existing neighborhoods.
- Use land efficiently to meet housing needs, minimize environmental impacts and maximize opportunities to use alternative transportation modes such as transit, bicycling and walking.
- Provide housing for special needs populations that is coordinated with support services.
- Build local government institutional capacity and monitor accomplishments to respond to housing needs effectively.
- Provide adequate sites to accommodate the City's long-term housing needs, with a buffer of high-density sites provided to acknowledge that some of the high density sites may be developed with market rate housing or other non-affordable housing uses and to ensure flexibility in future land use planning decisions.
- Accommodate high density housing consistent with the requirements of the Government Code, including Section 65583.2(c)(3)(B)(iv).
- Adopt a housing element meeting the requirements for certification by HCD.

DISCRETIONARY APPROVALS

The discretionary actions by the City, as lead agency, that are required to fully implement the Project are listed below.

- Certification of the Environmental Impact Report prepared for the Project;
- Adoption of a General Plan Amendment to update the Housing Element and to revise the Land Use Map for any or all of the sites as described in Table 2.0-1, with the exception of C-12 and C-41;
- Amend EGMC Title 23, Zoning Code, to revise the Zoning Map to rezone any or all of the sites as described in Table 2.0-1, with the exception of C-12 and C-41; and
- Amend EGMC Title 23, Zoning Code, to modify the RD-25 zoning district to adjust the allowed density range from 20.1 to 25.0 dwelling units per acre to 20.1 to 30.0 dwelling units per acre.

III. ENVIRONMENTAL REVIEW PROCESS

In accordance with Section 15082 of the CEQA Guidelines, the City circulated a Notice of Preparation (NOP) of an EIR for the Project on August 2, 2013 to the State Clearinghouse, public agencies, organizations, and the public. A public scoping meeting was held on August 15, 2013 to provide an overview of the Project and to receive comments from interested agencies, organizations, and members of the public regarding the scope of the environmental analysis to be included in the Draft EIR. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and comments provided by interested parties in response to the NOP are presented in Appendix A of the Draft EIR.

The City provided the State Clearinghouse with the Notice of Completion (NOC) and Draft EIR for review on December 16, 2013. The City published a public notice of availability (NOA) for the Draft EIR on December 13, 2013, inviting comment from the general public, trustee agencies, responsible agencies, organizations, and other interested parties. The Draft EIR was available for review from December 16, 2013 through January 30, 2014. The City's Planning Commission received comments on the Draft EIR at its meeting on January 9, 2014.

The Draft EIR contains a description of the Project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in the Draft EIR.

The City received oral comments at the January 9, 2014 Planning Commission meeting and received 11 comment letters regarding the Draft EIR. In accordance with CEQA Guidelines Section 15088, the Final

EIR responds to the written comments received as required by CEQA and identifies edits to the Draft EIR.

The City will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete", the City Council may certify the Final EIR in accordance with CEQA. Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or reject the Project.

A Mitigation Monitoring Program would also be adopted in accordance with Public Resources Code Section 21081.6(a) and State CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. This Mitigation Monitoring Program will be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the EIR.

IV. GENERAL FINDINGS

RECORD OF PROCEEDINGS AND CUSTODIAN OF RECORD

For purposes of CEQA and the findings set forth herein, the record of proceedings for the City's findings and determinations consists of the following documents and testimony, at a minimum:

- The NOP and all other public notices issued by the City in relation to the Project (e.g., Notice of Availability).
- The Elk Grove Housing Element Draft EIR and Final EIR and technical materials cited in the documents.
- All comments submitted by agencies or members of the public during the comment period on the NOP (Draft EIR Appendix A);
- All comments submitted by agencies or members of the public during the comment period on the Draft EIR (Final EIR Chapter 2.0);
- All non-draft and/or non-confidential reports and memoranda prepared by the City and consultants in relation to the EIR;
- Minutes and transcripts of the discussions regarding the Project and/or Project components at public hearings held by the City;
- The Elk Grove General Plan;
- Elk Grove Municipal Code Title 23, Zoning, and all other Municipal Code provisions cited in materials prepared by or submitted to the City;
- Staff reports associated with City Council and Planning Commission meetings on the Project.
- Any and all resolutions adopted by the City regarding the Project, and all staff reports, analyses, and summaries related to the adoption of those resolutions; and
- Those categories of materials identified in Public Resources Code Section 21167.6.

The City Council has relied on all of the documents listed above in reaching its decision on the Project, even if not every document was formally presented to the City Council or delivered to City Staff and stored in City files specifically generated in connection with the Project.

The City Clerk is the custodian of the administrative record. The documents and materials that constitute the administrative record are available for review at the City of Elk Grove City Hall, at 8401 Laguna Palms Way, Elk Grove, CA 95758.

CONSIDERATION OF THE ENVIRONMENTAL IMPACT REPORT

In adopting these Findings, this City Council finds that the Final EIR was presented to this Council, the decision-making body of the lead agency, which reviewed and considered the information in the Final EIR prior to approving the Project. By these findings, this City Council ratifies, adopts, and incorporates the analysis, explanation, findings, responses to comments, and conclusions of the Final EIR. The City Council finds that the Final EIR was completed in compliance with the California Environmental Quality Act. The Final EIR represents the independent judgment and analysis of the City.

SEVERABILITY

If any term, provision, or portion of these Findings or the application of these Findings to a particular situation is held by a court to be invalid, void, or unenforceable, the remaining provisions of these Findings, or their application to other actions related to the Project, shall continue in full force and effect unless amended or modified by the City.

CONSISTENCY WITH APPLICABLE PLANS AND ORDINANCES

The General Plan serves as the blueprint for development in the City. It is a long-range planning document that describes the goals, policies, and programs to guide decision-making. Once the General Plan is adopted, all development-related decisions must be consistent with the General Plan. If a development proposal is not consistent, it must be revised or the General Plan itself must be amended. State law requires a community's General Plan to be internally consistent. This means that the Housing Element, although subject to special requirements and a different schedule of updates, must function as an integral part of the overall General Plan, with consistency among it and the other General Plan elements.

The Elk Grove General Plan was adopted on November 19, 2003 and includes amendments made through 2013. It contains eleven elements, including Circulation; Conservation and Air Quality; Economic Development; Historic Resources; Housing; Land Use; Noise; Parks, Trails, and Open Space; Public Facilities and Finance; Safety; and Sustainability. The current Housing Element was last updated in 2009. The development potential and programs of the updated Housing Element are consistent with the land use envisioned by the Land Use Element and amended Land Use Policy Map, as revised by this Project. Land use and development projections of the General Plan are also linked to planned facilities and infrastructure capacity. Specific issues addressed in other sections of the General Plan but which are linked to and supported in the Housing Element include: (1) excellence in the design of new development (Land Use, Economic Development, and Public Facilities & Finance Elements); (2) safe and affordable housing for all persons (Land Use Element), and (3) relationship of a diversified economic base and associated jobs to housing supply (Economic Development Element).

The proposed update to the Housing Element has been reviewed in relationship to the Elk Grove General Plan and has been found to be internally consistent with the other elements of the City's General Plan, with the exception of General Plan amendments that will need to be undertaken to provide for land use designations and rezoning of all, or some combination of, the opportunity sites identified in Table 2.0-1 of the Draft EIR.

V. FINDINGS AND RECOMMENDATIONS REGARDING SIGNIFICANT AND UNAVOIDABLE IMPACTS AND CUMULATIVELY CONSIDERABLE IMPACTS

A. AESTHETICS AND VISUAL RESOURCES

1. POTENTIAL TO SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF THE SITE AND ITS SURROUNDINGS (EIR IMPACTS 3.1-1 AND 4.1)

(a) Potential Impact. The potential for the Project to substantially degrade the existing visual character or quality of the sites and their surroundings is described at pages 3.1-10 through 3.1-12 of the Draft EIR.

(b) Mitigation Measures. The City's development standards established in the Zoning Code, standards required by the Design Guidelines, and policies related to protection of visual resources in the General Plan would ensure that future development is compatible with neighboring uses. General Plan policies described in Section 3.3 of the Draft EIR which protect trees, wetlands, and natural habitat, would partially reduce visual impacts by ensuring that these natural and visual resources are retained to the extent feasible. The City's existing requirements and the previously identified mitigation measures would reduce potential visual impacts to the maximum extent feasible. The only additional mitigation would be to reduce the proposed development densities, which would not achieve the objectives of the Project.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that:

(1) Effects of Mitigation and Remaining Impacts. The combination of the procedures of the City's design review process, the standards of Title 23 of the Zoning Code, and applicable General Plan policies would address the design and location of a new development on the opportunity sites to ensure design compatibility with surrounding development and that sites characterized by natural features, specifically trees and creek corridors, would be designed to preserve and protect these features. The majority of sites are located in areas planned for urban development surrounded primarily by commercial, office, residential, school, and park uses, or a combination of these uses. However, views of the opportunity sites would significantly change with the introduction of multi-family development with two- to four-story buildings and would also exceed the densities and intensities that were anticipated in the General Plan, as previously described. This would represent a cumulatively considerable and significant and unavoidable impact of the Project.

(2) Overriding Considerations. The environmental, economic, social and other benefits of the Project override any remaining significant adverse impact of the Project associated with impacts to scenic resources and visual character, as more fully stated in the Statement of Overriding Considerations in Section X, below.

B. AIR QUALITY

1. POTENTIAL TO VIOLATE AN AIR QUALITY STANDARD OR CONTRIBUTE SUBSTANTIALLY TO AN EXISTING OR PROJECTED AIR QUALITY VIOLATION – PROJECT OPERATIONS. (EIR IMPACTS 3.2-2 AND 4.2)

(a) Potential Impact. The potential for the Project to violate an air quality standard or contribute substantially to an existing or projected air quality violation, is discussed at pages 3.2-15 through 3.2-18 of the Draft EIR.

(b) Mitigation Measures. Mitigation Measure 3.2-1 requires future development projects under the Housing Element to implement requirements contained in the City's Climate Action Plan (CAP) and to prepare and implement Air Quality Mitigation Plans (AQMPs) for subsequent development projects under the Housing Element. Mitigation Measure 3.2-1 would decrease the significance of operational air quality impacts associated with future development projects under the Housing Element, as discussed on pages 3.2-17 and 3.2-18 of the Draft EIR. However, as described on pages 3.2-17 and 3.2-18 of the Draft EIR, the emissions are not reduced to below the thresholds of significance established by the Sacramento Metropolitan Air Quality Management District (SMAQMD).

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that:

(1) Effects of Mitigation and Remaining Impacts. As identified on pages 3.2-17 and 3.2-18 of the Draft EIR, implementation of requirements contained in the City's Climate Action Plan (CAP) and the preparation of Air Quality Mitigation Plans (AQMPs) for subsequent development projects under the Housing Element would decrease the significance of operational air quality impacts associated with future development projects under the Housing Element, as discussed on pages 3.2-17 and 3.2-18 of the Draft EIR. However, as described on pages 3.2-17 and 3.2-18 of the Draft EIR, the emissions are not reduced to below the thresholds of significance established by the Sacramento Metropolitan Air Quality Management District (SMAQMD). Therefore, this would represent a cumulatively considerable and significant and unavoidable impact of the Project.

(2) Overriding Considerations. The environmental, economic, social and other benefits of the Project override any remaining significant adverse impact of the Project associated with air quality standards, as more fully stated in the Statement of Overriding Considerations in Section X, below.

C. GREENHOUSE GASES AND CLIMATE CHANGE

1. THE PROJECT MAY GENERATE GREENHOUSE GAS EMISSIONS, EITHER DIRECTLY OR INDIRECTLY, THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT, OR CONFLICT WITH AN APPLICABLE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES. (EIR IMPACT 3.4-1)

(a) Potential Impact. The potential for the Project to generate significant greenhouse gas (GHG) emissions or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions, is discussed at pages 3.4-16 through 3.4-22 of the Draft EIR.

(b) Mitigation Measures. Mitigation Measure 3.4-1 requires future development projects under the Housing Element to demonstrate compliance with the Climate Action Plan, including, but not limited to, measures BE-6, BE-7, BE-9, BE-10, RC-1, RC-2, TACM-5, and TACM-9.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that:

(1) Effects of Mitigation and Remaining Impacts. As identified on pages 3.4-16 through 3.4-22 of the Draft EIR, implementation of Mitigation Measure 3.4-1 would ensure that the Project implements the applicable CAP measures described in the Draft EIR and reduce potential greenhouse gas emissions to the greatest extent feasible. However, even after implementation of Mitigation Measure 3.4-1, the Project would contribute to an exceedance of the GHG emissions reductions contained in the CAP and analyzed in the CAP SEIR. For this reason, this is considered to be a significant and unavoidable impact and the Project would have a cumulatively considerable contribution to the impact. Mitigation Measure 3.4-1 would reduce this impact to the greatest extent feasible, and there is no additional feasible mitigation available that would reduce this impact to a less than significant level.

(2) Overriding Considerations. The environmental, economic, social and other benefits of the Project override any remaining significant adverse impact of the Project associated with greenhouse gas emissions, as more fully stated in the Statement of Overriding Considerations in Section X, below.

D. TRANSPORTATION AND CIRCULATION

1. THE PROJECT HAS THE POTENTIAL TO CONFLICT WITH AN APPLICABLE PLAN, ORDINANCE, OR POLICY ESTABLISHING ACCEPTABLE LEVELS OF SERVICE FOR THE PERFORMANCE OF THE CIRCULATION SYSTEM. (EIR IMPACTS 3.11-1 AND 4.11)

(a) Potential Impact. The potential for the Project to result in an increase in traffic beyond the level of traffic anticipated under the adopted General Plan designations, is discussed at pages 3.11-33 through 3.11-35 of the Draft EIR.

(b) Mitigation Measures. As documented under existing conditions, congested conditions occur on SR-99 and I-5 due to bottlenecks that cause vehicle queuing on SR-99 and I-5 during the morning and evening peak periods. The addition of the Project will exacerbate these conditions.

To mitigate impacts based on the Caltrans evaluation criteria, subsequent projects should pay their fair-share of the cost for mobility enhancements consistent with those identified in the most current version of the SR-99 & Interstate 5 CSMP. Table 13 of the CSMP identifies that the construction of bus/carpool lanes on I-5 from US 50 to Elk Grove Boulevard is fully funded. Another improvement that would improve SR-99, and potentially I-5, operations is

construction of carpool lanes on I-5 from Elk Grove to the San Joaquin County line; this is identified as a visionary project in Table 14 of the CSMP with no estimate of cost or identified method of funding. The CSMP does not identify capital projects in either Table 13 or 14 to add additional lanes or other improvements on SR-99 in the vicinity of the City that would improve the existing and planned congested conditions. Construction and implementation of necessary improvements is uncertain because the implementation of such improvements is outside of the City's jurisdiction. While implementation of capital and operational mobility enhancements would lessen the significant impact associated with I-5 and SR-99, there is not an enforceable fee program that has been adopted by Caltrans and there is no mechanism in place to collect adequate funds for the improvements and ensure that the funds are used to construct the necessary improvements. Consequently, the mitigation is not feasible.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that:

(1) Effects of Mitigation and Remaining Impacts. As identified on pages 3.11-33 through 3.11-35 of the Draft EIR, successful implementation of some of the proposed improvements identified in the CSMP will require the cooperation of third party agencies (Caltrans, Sacramento, County, or City of Sacramento) over which Elk Grove has no control. For this latter reason, Elk Grove is conservatively acknowledging the possibility that, despite its own commitment to work with Caltrans, mutually acceptable accommodation may not be reached. General Policy CI-2 relates to coordination and participation with the City of Sacramento, Sacramento County, and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations, including joint transportation planning efforts, roadway construction and funding. Consistent with Policy CI-2, the City should continue to work with Caltrans and other affected agencies to address operational conditions on SR-99. This commitment to improving operation on SR-99 in the City is also demonstrated with Policy CI-11, related to implementing improvements to I-5 and SR-99, and Policy CI-12, related to the Capital SouthEast Connector project. However, since SR-99 is under the jurisdiction of Caltrans, these facilities are outside the City's jurisdiction to implement improvements that would mitigate these impacts and a funding program to collect and implement funds from subsequent development projects is not in place. Therefore, these impacts would be cumulatively considerable and significant and unavoidable.

(2) Overriding Considerations. The environmental, economic, social and other benefits of the Project override any remaining significant adverse impact of the Project associated with traffic volumes and congestion on State Route 99 and Interstate 5, as more fully stated in the Statement of Overriding Considerations in Section X, below.

VI. FINDINGS AND RECOMMENDATIONS REGARDING SIGNIFICANT IMPACTS WHICH ARE MITIGATED TO A LESS THAN SIGNIFICANT LEVEL

A. AESTHETICS

1. POTENTIAL TO CREATE A NEW SOURCE OF SUBSTANTIAL LIGHT OR GLARE WHICH WOULD ADVERSELY AFFECT DAY OR NIGHTTIME VIEWS IN THE AREA. (EIR IMPACT 3.1-2)

(a) Potential Impact. The potential for the Project introduce new sources of light and glare that would have a significant impact is discussed at pages 3.1-12 and 3.1-13 of the Draft EIR.

(b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation Measure 3.1-1.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that implementation of mitigation measure 3.1-1 would ensure that future multi-family development projects minimize use of reflective surfaces. Mitigation measure 3.1-1 would reduce impacts associated with light and glare to a less than significant level. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

B. AIR QUALITY

1. PROJECT CONSTRUCTION HAS THE POTENTIAL TO CAUSE A VIOLATION OF AN AIR QUALITY STANDARD OR CONTRIBUTE SUBSTANTIALLY TO AN EXISTING OR PROJECTED AIR QUALITY VIOLATION. (EIR IMPACT 3.2-3)

(a) Potential Impact. The potential for the Project to result in temporary construction related air quality impacts is discussed at pages 3.2-18 through 3.3-24 of the Draft EIR.

(b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.2-2, 3.2-3 and 3.2-4.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that implementation of Mitigation measures 3.2-2, 3.2-3 and 3.2-4 would implementation of the Sacramento Metropolitan Air Quality Management District (SMAQMD) Basic Constriction Emission Control Measures and the Enhanced Exhaust Control Practices to reduce air pollutant emissions. Additionally, mitigation measure 3.2-4 limits grading activities on the individual opportunity sites to have a maximum daily disturbed area that does not exceed 15 acres. Mitigation measures 3.2-2, 3.2-3 and 3.2-4 would reduce construction emissions to a less than significant level. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

2. THE PROJECT HAS THE POTENTIAL FOR PUBLIC EXPOSURE TO TOXIC AIR CONTAMINANTS. (EIR IMPACT 3.2-5)

(a) Potential Impact. The potential for the Project to result in public exposure to toxic air contaminants is discussed at pages 3.2-26 through 3.3-29 of the Draft EIR.

(b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.2-5.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that implementation of Mitigation measure 3.2-5 would require setbacks of all dwelling units and recreation areas a minimum of 80 feet from the nearest travel land of SR-99, or a qualified professional must prepare a health risk assessment to identify site planning and/or project design measures specific to the subsequent project that would reduce exposure to toxic air contaminants to a less than significant level. Mitigation measure 3.2-5 would potential exposure to toxic air contaminants to a less than significant level. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

C. NOISE

1. POTENTIAL TO EXPOSE PERSONS TO, OR GENERATE NOISE LEVELS IN EXCESS OF APPLICABLE STANDARDS OR TO RESULT IN A SUBSTANTIAL TEMPORARY OR PERIODIC INCREASE IN AMBIENT NOISE LEVELS IN THE PROJECT VICINITY ABOVE LEVELS EXISTING WITHOUT PROJECT - CONSTRUCTION NOISE (EIR IMPACT 3.8-2)

(a) Potential Impact. The potential for the Project to result in a substantial temporary increase in ambient noise levels in the project vicinity is discussed at pages 3.8-20 through 3.8-21 of the Draft EIR.

(b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.8-1.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts associated with temporary construction noise will be mitigated to a less than significant level as mitigation measure 3.8-1 requires a range of practices and measures to be implemented during construction activities to reduce noise levels to the greatest extent feasible. Any remaining impacts related to exposure to temporary construction noise after implementation of mitigation measure 3.8-1 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

2. EXPOSURE OF PERSONS TO OR GENERATION OF EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS (EIR IMPACT 3.8-3)

(a) Potential Impact. The potential for the Project to result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels is discussed at pages 3.8-21 through 3.8-22 of the Draft EIR.

(b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.8-2.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts associated with groundborne vibration and groundborne noise will be mitigated to a less than significant level as mitigation measure 3.8-2 requires a range of practices and measures to be implemented during construction activities, including testing and limitations on vibration levels, to reduce groundborne vibration levels to the greatest extent feasible. Any remaining impacts related to groundborne noise or vibration after implementation of mitigation measure 3.8-2 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

3. IMPACT 3.8-4: EXPOSURE OF PERSONS TO, OR GENERATION OF NOISE LEVELS IN EXCESS OF APPLICABLE STANDARDS (EIR IMPACT 3.8-4)

(a) Potential Impact. The potential for the Project to result in exposure of persons to or generation of noise levels in excess of applicable standards is discussed at pages 3.8-23 through 3.8-26 of the Draft EIR.

(b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.8-3, 3.8-4, 3.8-5, 3.8-6, and 3.8-7.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts associated with exposure to, or generation of, excessive noise levels will be mitigated to a less than significant level as mitigation measures 3.8-3, 3.8-4, 3.8-5, 3.8-6, and 3.8-7 require a range of practices and measures to be implemented in order to ensure that interior and exterior noise exposure levels in new development project do not exceed applicable noise standards. Any remaining impacts related to noise generation and noise exposure after implementation of mitigation measures 3.8-3, 3.8-4, 3.8-5, 3.8-6, and 3.8-7 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the

requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

VII. Findings and Recommendations Regarding Those Impacts Which are Less Than Significant or Less Than Cumulatively Considerable

Specific impacts within the following categories of environmental effects were found to be less than significant as set forth in more detail in the Draft EIR and Final EIR.

Air Quality: The following specific impacts were found to be less than significant: 3.2-1, 3.2-4, and 3.2-6.

Biological Resources: The following specific impacts were found to be less than significant: 3.3-1, 3.3-2, 3.3-3, 3.3-4, 3.3-5, and 3.3-6.

Hazards and Hazardous Materials: The following specific impacts were found to be less than significant or to have no impact: 3.5-1, 3.5-2, and 3.5-3.

Hydrology and Water Quality: The following specific impacts were found to be less than significant: 3.6-1, 3.6-2, 3.6-3, 3.6-4, 3.6-5, and 3.6-6.

Land Use: The following specific impact was found to be less than significant: 3.7-1.

Noise: The following specific impacts were found to be less than significant: 3.8-1, 3.8-5, and 3.8-6.

Population and Housing: The following specific impact was found to be less than significant: 3.9-1.

Public Services and Recreation: The following specific impacts were found to be less than significant: 3.10-1, 3.10-2, 3.10-3, 3.10-4, and 3.10-5.

Traffic and Circulation: The following specific impacts were found to be less than significant: 3.11-2 and 3.11-3.

Utilities: The following specific impacts were found to be less than significant: 3.12-1, 3.12-2, 3.12-3, 3.12-4, and 3.12-5.

The above impacts are less than significant because the EIR determined that each impact is less than significant for the Project.

VIII. Impacts Addressed in a Previous EIR

The City's General Plan was adopted by the City Council on November 19, 2003 and reflects amendments through July 2013. An Environmental Impact Report was prepared to analyze and disclose the environmental impacts associated with General Plan implementation. While the Project would result in more intense development than envisioned by the General Plan, the opportunity sites were all anticipated for future development in the General Plan. Therefore, the Project is consistent with the

C. BIOLOGICAL RESOURCES

1. CUMULATIVE BIOLOGICAL RESOURCE IMPACTS - IMPACT 4.10.4:

a) Impact: Implementation of the proposed General Plan along with potential development of the Urban Study Areas would contribute to cumulative impacts associated with significant effects to special-status plant and wildlife species and habitat loss. This would be a cumulative significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR page 4.10-51 through 4.10-56.

b) Mitigation Measures: 4.10.1a, 4.10.1b, and 4.10.3

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed cumulative impacts associated with significant effects to special-status plant and wildlife species and habitat loss, including those associated with the Project. There are no effects on the environment related to cumulative impacts associated with significant effects to special-status plant and wildlife species and habitat loss that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that cumulative impacts associated with significant effects to special-status plant and wildlife species and habitat loss will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that mitigation measures 4.10.1a, 4.10.1b, and 4.10.3 were identified in the General Plan EIR for Impact 4.10.4 and, therefore, these mitigation measures shall be required of the Project in association with Impact 4.10.4.

D. CULTURAL RESOURCES

1. CUMULATIVE IMPACTS TO PREHISTORIC AND HISTORIC RESOURCES - IMPACT 4.11.3:

a) Impact: Implementation of the proposed General Plan along with potential development in the Urban Study Areas could contribute to the disturbance of known and undiscovered prehistoric and historic resources in the Elk Grove area. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR page 4.11-14 through 4.11-15.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed cumulative impacts associated with the disturbance of known and undiscovered prehistoric and historic resources in the Elk Grove area, including those associated with the Project. There are no effects on the environment related to cumulative impacts associated with the disturbance of known and undiscovered prehistoric and historic resources in the Elk Grove area that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new

environmental analysis and conclusions of the General Plan EIR that are related to the location of development, such as potential for conversion of agricultural land to urban uses.

The General Plan EIR evaluated the full range of environmental impacts anticipated with buildout of the General Plan land uses. The following is a summary of the impacts identified in the General Plan EIR that are relevant to subsequent development activities that may involve implementation of various measures associated with the Project. These subsequent development activities, such as the Project, are required to be reviewed for compliance with the General Plan and to comply with relevant mitigation measures adopted in the General Plan EIR to mitigate cumulative impacts. All of the mitigation measures identified in the General Plan EIR were incorporated into the General Plan or were included in a subsequent policy document, such as the Design Guidelines, and as are applied to and required of the Project.

Development has occurred in the City and throughout the region since the adoption of the General Plan. However, the General Plan EIR anticipated that development would occur and conditions in the City are consistent with the evaluation in the General Plan EIR, which identified increases in traffic, air pollutant emissions, noise, population and housing, an increased demand for public services and utilities, and the potential for development to reduce the amount of agricultural resources and open space and to have impacts associated with aesthetics, biological resources, cultural resources, geology and soils, hazards, hydrology and soils.

The City makes the following findings regarding impacts addressed in the General Plan EIR.

A. AGRICULTURAL RESOURCES

1. CUMULATIVE IMPACTS TO AGRICULTURAL RESOURCES - IMPACT 4.1.3

a) Impact: Implementation of the proposed General Plan along with potential development in the Urban Study Areas would contribute significantly to the conversion of important farmland and agriculture/urban interface conflicts. This would be a cumulative significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.1-21 through 4.1-23.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative impacts to agricultural resources, including those associated with the Project. There are no effects on the environment related to agricultural resources that are peculiar to the parcels or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to agricultural resources increases will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no feasible mitigation measures were identified in the General Plan EIR for Impact 4.1.3 and, therefore, no mitigation is required of the Project in association with Impact 4.1.3.

B. GEOLOGY AND SOILS

1. SOIL EROSION - IMPACT 4.9.4:

a) Impact: Implementation of the proposed General Plan along with potential development of the Urban Study Areas could contribute to cumulative soil erosion impacts. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR page 4.9-11.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with soil erosion, including those associated with the Project. There are no effects on the environment related to soil erosion that are peculiar to the parcels or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to soil erosion will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.9.4 and, therefore, no mitigation is required of the Project in association with Impact 4.9.4.

2. EXPANSIVE SOILS AND SEISMIC HAZARDS - IMPACT 4.9.5:

a) Impact: Implementation of the proposed General Plan along with potential development of the Urban Study Areas could result in cumulative impacts to expansive soils and seismic hazards. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR page 4.9-12.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with expansive soils and seismic hazards, including those associated with the Project. There are no effects on the environment related to expansive soils and seismic hazards that are peculiar to the parcels or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to expansive soils and seismic hazards will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.9.5 and, therefore, no mitigation is required of the Project in association with Impact 4.9.5.

information that shows that cumulative impacts associated with the disturbance of known and undiscovered prehistoric and historic resources in the Elk Grove area will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.11.3 and, therefore, no mitigation is required of the Project in association with Impact 4.11.3.

2. CUMULATIVE IMPACTS TO PALEONTOLOGICAL RESOURCES - IMPACT 4.11.4:

a) Impact: Implementation of the proposed General Plan along with potential development of the Urban Study Areas could contribute to the loss of paleontological resources in the Elk Grove area. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR page 4.11-16.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed cumulative impacts associated with the loss of paleontological resources in the Elk Grove area, including those associated with the Project. There are no effects on the environment related to cumulative impacts associated with the loss of paleontological resources in the Elk Grove area that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that cumulative impacts associated with loss of paleontological resources in the Elk Grove area will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.11.4 and, therefore, no mitigation is required of the Project in association with Impact 4.11.4.

IMPACTS PECULIAR TO THE PROJECT OR PROJECT SITE

The City finds that the policies and actions referenced in the General Plan EIR in Sections 4.1 through 4.13 were incorporated into the General Plan or were included in a subsequent policy document, such as the Design Guidelines, and as such are applied to and required of the Project. These are applied to the Project as uniform standards applicable to all projects in the City. Application of these adopted General Plan policies and actions as discussed in Sections 3.1 through 4.0 of the Elk Grove Housing Element Draft EIR serve to substantially mitigate effects peculiar to the Project, including those impacts described above in Section VIII, based upon the substantial evidence provided by the General Plan EIR, and those impacts described in Sections V, VI, and VII of these findings based on the substantial evidence provided for the discussion and analysis of each impact in the Draft EIR as referenced in Sections V, VI, and VII.

IX. PROJECT ALTERNATIVES

The State CEQA Guidelines Section 15126.6 mandates that every EIR evaluate a no-project alternative, plus a feasible and reasonable range of alternatives to the Project or its location. The alternatives were formulated considering the project objectives outlined on page 5.0-1 of the Draft EIR. The alternatives analysis in Chapter 5.0 of the Draft EIR provides a comparative analysis of the alternatives to the Project, including comparison of potential to result in significant impacts and significant and unavoidable impacts, for the consideration of reasonable feasible options for minimizing environmental consequences of a project.

As explained below, these findings describe and reject, for reasons documented in the EIR and summarized below, each one of the Project alternatives, and the City finds that approval and implementation of the Project, as amended, is appropriate. The evidence supporting these findings is presented in Chapter 5.0 of the Draft EIR.

Public Resources Code §21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" Where a lead agency has determined that, even after the adoption of all feasible mitigation measures, a project as proposed will still cause one or more significant environmental effect that cannot be substantially lessened or avoided, the agency, prior to approving the project as mitigated, must first determine whether, with respect to such impacts, there are any feasible project alternatives that are both environmentally superior and feasible within the meaning of CEQA. Although an EIR must evaluate this range of potentially feasible alternatives, an agency decision-making body may ultimately conclude that a potentially feasible alternative is actually infeasible. (*City of Santa Cruz, supra*, 177 Cal.App.4th at p. 981, 999.) The failure of an alternative to fully satisfy project objectives determined to be important by decision-makers, or the fact that an alternative fails to promote policy objectives of concern to such decision-makers, are grounds for finding an alternative to be infeasible. (*Id.* at pp. 992, 1000-1003.) Thus, even if a Project alternative will avoid or substantially lessen any of the significant environmental effects of the Project as mitigated, the decision-makers may reject the alternative for such reasons.

Under CEQA, where a significant impact can be substantially lessened (i.e., mitigated to an "acceptable level") solely by the adoption of mitigation measures, the agency, in drafting its findings, has no obligation to consider the feasibility of alternatives with respect to that impact, even if an alternative would mitigate the impact to a greater degree than the proposed project. (Pub. Resources Code, § 21002; *Laurel Hills Homeowners Association v. City Council* (1978) 83 Cal.App.3d 515, 521 (*Laurel Hills*); see also *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 730-731; and *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 400-403.) Specifically, the CEQA Guidelines provide that "[t]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." (CEQA Guidelines, § 15126.6(a).) When a lead agency has determined that certain effects on the environment of a project are not significant, the lead agency does not need to discuss those impacts in detail within the environmental impact report. (Pub. Resources Code, § 21100.) Therefore, like mitigation measures, a lead agency is not

required to consider the feasibility of implementing an alternative to a project unless the alternative will avoid or substantially lessen a significant impact. (CEQA Guidelines, § 15126.4(a)(3) [mitigation measures are not required for effects which are not found to be significant]; CEQA Guidelines, § 15126.6(a) [alternatives must focus on significant impacts of the Project and the ability of the alternative to avoid or substantially lessen such impacts].)

Under CEQA Guidelines §15126.6(a), the alternatives to be discussed in detail in an EIR should be able to "feasibly attain most of the basic objectives of the project[.]" For this reason, the objectives described above in subsection A below provide the framework for defining possible alternatives. The selection of alternatives analyzed in the EIR took into account the Project objectives, and primary consideration was given to alternatives that would reduce the Project's significant impacts that could not be mitigated to a level of less than significant while still meeting most of the basic Project objectives. Based on these objectives, the City developed three alternatives that it addressed in detail in the EIR, and another two alternatives that were considered but were not addressed in further detail.

Pursuant to the requirements of CEQA Guidelines §15126.6, and in light of the Project objectives, the following alternatives to the Project were identified:

- Alternative 1 - No Project Alternative,
- Alternative 2 - Reduced Sites Alternative, and
- Alternative 3 – Affordable Housing Overlay.

The City Council finds that that a good faith effort was made to evaluate a range of potentially feasible alternatives in the EIR that are reasonable alternatives to the Project and could feasibly obtain most of the basic objectives, even when the alternatives might impede the attainment of some of the Project objectives and might be more costly. (CEQA Guidelines §15126.6(b).) As a result, the scope of alternatives analyzed in the EIR is reasonable. (See, e.g., Draft EIR, pp. 5.0-1 to 5.0-12)

A. IDENTIFICATION OF PROJECT OBJECTIVES

The purpose of the Project is to address the housing needs and objectives of the City and to meet the requirements of State law. As described in Chapter 2.0, Project Description, of the Draft EIR, The Project includes the following goals and objectives:

Housing Element Goals

- Housing Goal 1: Provide adequate sites to accommodate the City's share of regional housing needs through appropriate zoning and development standards.
- Housing Goal 2: Assist in the development and provision of adequate housing stock to meet the needs of extremely low-, very low-, low-, and moderate-income households and special needs groups.
- Housing Goal 3: Identify and, where appropriate, remove governmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and special needs groups.

- Housing Goal 4: Conserve and improve the condition of existing affordable housing stock.
- Housing Goal 5: Promote housing opportunities for all persons, regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.
- Housing Goal 6: Preserve assisted (subsidized) housing developments for lower-income households.

Housing Element Objectives

- Maintain and enhance existing housing and blend well-designed new housing into existing neighborhoods.
- Use land efficiently to meet housing needs, minimize environmental impacts and maximize opportunities to use alternative transportation modes such as transit, bicycling and walking.
- Provide housing for special needs populations that is coordinated with support services.
- Build local government institutional capacity and monitor accomplishments to respond to housing needs effectively.
- Provide adequate sites to accommodate the City's long-term housing needs, with a buffer of high-density sites provided to acknowledge that some of the high density sites may be developed with market rate housing or other non-affordable housing uses and to ensure flexibility in future land use planning decisions.
- Accommodate high density housing consistent with the requirements of the Government Code, including Section 65583.2(c)(3)(B)(iv).
- Adopt a housing element meeting the requirements for certification by HCD.

B. ALTERNATIVES ANALYSIS IN EIR

1. NO PROJECT ALTERNATIVE:

The No Project Alternative is discussed on pages 5.0-3, 5.0-4, 5.0-11, and 5.0-12 of the Draft EIR. The No Project Alternative is the continuation of the existing Housing Element. Under this alternative, no changes to the General Plan or Zoning Code would occur. Specifically, the sites identified in Table 2.0-1 of the Draft EIR would retain the existing General Plan and zoning designations. The RD-25 zoning district would not be revised to adjust the allowed density range from 20.1 to 25.0 dwelling units per acre to 20.1 to 30.0 dwelling units per acre.

The environmental impacts associated with the Project described in Sections 3.1 through 4.0 of the EIR would not occur. As a result, the No Project Alternative would be environmentally superior to the Project. While the No Project Alternative would avoid the impacts associated with the Project, the sites identified in Table 2.0-1 of the Draft EIR could be developed under the existing General Plan land use designations and zoning. This alternative would result in development of 3,968 dwelling units (a reduction of 4,875 units in comparison to the Project) and uses accommodating approximately 2,058 employees (an increase of 2,058 employees in comparison to the Project) on the opportunity sites and

associated environmental impacts, including transportation, air quality, noise, biological resources, public services and recreation, utilities, hydrology and water quality, geology and soils, and aesthetics.

Findings: The No Project Alternative is rejected as an alternative because it would not achieve the Project's objectives.

Explanation: This alternative would not realize the benefits of the Project nor achieve the Project objectives. This alternative would not provide adequate sites to accommodate the City's long-term housing needs. Under the No Project Alternative, the City would not be able to accommodate its fair-share of the Regional Housing Needs Allocation and which is a total of 3,462 high density residential units. In addition to not accommodating the City's housing needs, this alternative would not accommodate high density housing consistent with the requirements of the Government Code, including Section 65583.2(c)(3)(B)(iv). This alternative would not meet the State law requirements for certification of a Housing Element by HCD.

2. REDUCED SITES ALTERNATIVE:

The Reduced Sites Alternative is discussed on pages 5.0-3 through 5.0-9, 5.0-11, and 5.0-12 of the Draft EIR. Under Alternative 2, Sites 4 through 7, C-3 through C-11, C-15 through C-17, C-24, C-26, C-28 through C-30, and C-34 through C-40 would be removed from the Project. Site C-22 would be reduced to 8 acres and Site C-23 would be reduced to 12 acres. Sites 2, 3, 7A, C-1, C-2, C-12 through C-14, C-18 through C-21, C-25, C-27, C-31 through C-34, and C-41 would remain as proposed by the Project, as shown in Table 5-1 of the Draft EIR.

As described in Chapter 5.0 of the Draft EIR, this alternative would reduce environmental impacts associated with aesthetics, biological resources, air quality, transportation and greenhouse gases in comparison to the Project.

Findings: The Reduced Sites Alternative is rejected as an alternative because it is less desirable than the Project, as approved, for the reasons described below.

Explanation: The Project approved is a modified version of the Project that approves fewer sites and units than Alternative 2 and will result in a reduction to the adverse environmental impacts that would be reduced by this alternative. The Project, as approved, would result in reaching the Regional Housing Needs Allocation of 3,462 high density units along with a minimal buffer of additional units available to the City for future rezones. The Project, as approved, would result in fewer impacts associated with aesthetics, greenhouse gases, air quality, and transportation compared with this alternative.

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed project.

As discussed in Chapter 5.0 of the Draft EIR and summarized in Table 5.0-1 of the Draft EIR, the No Project Alternative is the environmentally superior alternative. However, as required by CEQA, when the No Project Alternative is the environmentally superior alternative, the environmentally

superior alternative among the others must be identified. Therefore, the Reduced Sites Alternative as proposed by Council is the next environmentally superior alternative..

As discussed above, while the Reduced Sites Alternative would result in a reduction in adverse environmental impacts in comparison to the Project as analyzed in the Draft EIR, the Project has been modified to reduce both the number of sites and number of units which results in a reduction in environmental impacts. The Project is superior to alternative 2 in terms of environmental benefits. Further, this Project, as approved, assists the City in meeting its housing needs and achieving the Project objectives while taking into account economic and social issues deemed important by the land use authority to represent the best mix of sites.

For these economic, social, and other benefits, the Project is approved, and is deemed superior to the Reduced Sites Alternative.

3. AFFORDABLE HOUSING OVERLAY ALTERNATIVE:

The Affordable Housing Overlay Alternative is discussed on pages 5.0-3 and 5.0-9 through 5.0-12 of the Draft EIR. The Affordable Housing Overlay Alternative would place an affordable housing overlay designation on the 42 opportunity sites identified in Table 2.0-1 of the Draft EIR. Under this alternative, the sites could be developed either under the existing General Plan land use designation and zoning or as multifamily housing. However, multifamily units would be limited to the amount necessary to accommodate the City's RHNA. Depending on which of the opportunity sites are developed with affordable housing, this alternative will yield approximately 775 (if sites with existing higher density designations are developed) to 2,938 (if sites with non-residential or lower density designations are developed) more high density residential dwelling units than allowed under the adopted General Plan designations. This is a significant reduction in comparison to the Project, which proposed would accommodate 4,875 more units than allowed by adopted General Plan designations. As approved, the Project would accommodate more than twice as many units than allowed by adopted General Plan designations.

Findings: The Affordable Housing Alternative is rejected because it will not result in significant benefits in comparison to the Project and is infeasible for the economic, social, and other considerations described below.

Explanation: This alternative would meet the majority of the objectives for the Project. However, this alternative would not meet the objective of creating a buffer of sites that exceeds the City's housing needs. As described in Chapter 5.0 of the Draft EIR, this alternative would reduce the significant and unavoidable impacts associated with the Project.

This alternative would result in uncertainty regarding which sites may be developed with multifamily housing. This alternative would be difficult for the City to implement as the City would have to ensure that adequate affordable housing overlay sites are provided to accommodate the City's housing needs. This means that projects that are proposed consistent with the underlying land use designations (such as single family residential or commercial projects) may be unable to proceed if these projects would interfere with the City's ability to accommodate the RHNA, even though the Project would be consistent with the General Plan land use and zoning designations. Similarly, the City would be limited to approving multifamily units that do not exceed the RHNA. If multiple applications are

submitted in the same timeframe that would exceed the RHNA, the City would have to determine which of the applications would not move forward. This results in uncertainty for property owners and developers regarding the potential feasibility of their projects.

For these economic, social, and other considerations, the Project is deemed superior to the Affordable Housing Overlay Alternative.

X. STATEMENTS OF OVERRIDING CONSIDERATIONS RELATED TO THE PROJECT FINDINGS

As described in Section V of these Findings, the following significant and unavoidable impacts could occur with implementation of the Project:

- Impact 3.1-1: The Project has the potential to substantially degrade the existing visual character or quality of the site and its surroundings.
- Impact 3.2-2: The Project has the potential to violate an air quality standard or contribute substantially to an existing or projected air quality violation – Project Operations.
- Impact 3.4-1: The Project may generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
- Impact 3.11-1: The Project has the potential to conflict with an applicable plan, ordinance, or policy establishing acceptable levels of service for the performance of the circulation system.
- Impact 4.1: The Project has the potential to contribute to the cumulative degradation of the existing visual character of the region.
- Impact 4.2: The Project has the potential to contribute to cumulative impacts on the region's air quality.
- Impact 4.11: The Project has the potential to contribute to cumulative impacts on the transportation network.

The City Council has balanced the benefits of the Project against its unavoidable environmental risks in determining whether to approve the Project, and has determined that the benefits of the Project outweigh the unavoidable adverse environmental effects. The reasons set forth below are based on the EIR and other information in the record. As set forth in the preceding sections, approving the Project will result in several significant adverse environmental effects that cannot be reduced to a less-than-significant level, even with the adoption of all feasible mitigation measures. As determined above, however, there are no additional feasible mitigation measures, nor are there feasible alternatives, that would mitigate or substantially lessen the impacts to a less-than-significant level. Therefore, despite these significant environmental effects, the City Council, in accordance with Public Resources Code Sections 21001, 21002.1(c), 21081(b) and CEQA Guidelines Section 15093, chooses to approve the Project because, in its judgment, the following economic, social, and other benefits that the Project will produce will render the significant effects acceptable.

Substantial evidence supporting the benefits cited in this Statement of Overriding Considerations can be found in the preceding findings, which are incorporated by reference into this section, and in the documents found in the record of proceedings, as defined in Section IV, above. Any one of the following reasons is sufficient to demonstrate that the benefits of the Project outweigh its unavoidable adverse environmental effects, thereby justifying approval of the Project.

A. Compliance with State Law. The Project would bring the Housing Element of the General Plan into compliance with State law.

B. RHNA Obligations. The Project would meet all of the Project objectives, including providing adequate sites to accommodate the City's long-term housing needs, providing a buffer of high-density sites to ensure flexibility in future land use planning decisions, accommodate high density housing consistent with the requirements of the Government Code. The Project would provide adequate sites to accommodate the City's fair-share of regional housing needs allocated by SACOG, as required by State law.

C. Implement the Housing Element. The Project would implement the existing 2009 Housing Element, which requires the City to maintain an adequate supply of appropriately zoned land to accommodate the City's projected housing needs for all income levels and special needs groups.

D. Housing Choice. The Project would provide a variety of housing choices by providing a variety of housing opportunities proportionally by income to accommodate the needs of people who currently work or live in the City, such as teachers, young people just getting started, and seniors who want to down-size, who either cannot find homes or cannot afford market-rate housing in the City.

E. Housing Needs. The Project would provide effective housing policies and programs by continuing existing and develop new programs and policies to meet the projected affordable housing need, including the needs of persons living with disabilities and other special needs households at extremely low, very low, low, and moderate income levels.

Based on the entire record and the EIR, the social and other benefits of the Project outweigh and override any significant unavoidable environmental effects that would result from future Project implementation. The City Council has determined that any environmental detriment caused by the Project has been minimized to the extent feasible through the mitigation measures identified herein, and, where mitigation is not feasible, has been outweighed and counterbalanced by the significant social, environmental, and other benefits of the Project to the City.

XI. SUMMARY

A. Based on the foregoing Findings and the information contained in the record, the City Council has made one or more of the following Findings with respect to each of the significant environmental effects of the Project:

1. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effects identified in the EIR.

2. To the extent that such changes or alterations are within the responsibility and jurisdiction of another public agency and not the City, those changes or alterations have been, or can and should be, adopted by that other agency.

3. Specific economic, legal, social, technological, or other considerations, including considerations make infeasible the alternatives identified in the environmental impact report.

B. Based on the foregoing Findings and the information contained in the record, it is determined that:

1. All significant effects on the environment due to the approval of the Project have been eliminated or substantially lessened where feasible; and

2. Any remaining significant effects on the environment found to be unavoidable are acceptable due to the factors described in the Statement of Overriding Considerations in Section X, above.

Exhibit D

MITIGATION MONITORING AND REPORTING PROGRAM
2013-2021 HOUSING ELEMENT
PL0018

INTRODUCTION

The California Environmental Quality Act (CEQA) Guidelines, Section 15074(d), requires public agencies, as part of the adoption of a mitigated negative declaration, to adopt a reporting and monitoring program to ensure that changes made to the roject as conditions of project approval to mitigate or avoid significant environmental effects are implemented. The Mitigation Monitoring and Reporting Program (MMRP) contained herein are intended to satisfy the requirements of CEQA as they relate to the Housing Element Project (Project) in the City of Elk Grove (City). The MMRP is intended to be used by City staff, Project applicant, Project contractors, and mitigation monitoring personnel during implementation of the Project.

The MMRP will provide for monitoring of construction activities as necessary in-the-field identification and resolution of environmental concerns, and reporting to City staff. The MMRP will consist of the components described below.

COMPLIANCE CHECKLIST

Table 1 contains a compliance-monitoring checklist that identifies all adopted mitigation measures, identification of agencies responsible for enforcement and monitoring, and timing of implementation.

FIELD MONITORING OF MITIGATION MEASURE IMPLEMENTATION

During construction of future multifamily development on the Project sites, the City of Elk Grove's designated construction inspector will be responsible for monitoring the implementation of mitigation measures. The inspector will report to the City of Elk Grove Department of Public Works, and will be thoroughly familiar with all plans and requirements of the project. In addition, the inspector will be familiar with construction contract requirements, construction schedules, standard construction practices, and mitigation techniques. Aided by Table 1, the inspector will typically be responsible for the following activities:

1. On-site, day to day monitoring of construction activities;
2. Reviewing construction plans to ensure conformance with adopted mitigation measures;
3. Ensuring contractor knowledge of and compliance with all appropriate conditions of project approval;
4. Evaluating the adequacy of construction impact mitigation measures, and proposing improvements to the contractors and City staff;

5. Requiring correction of activities that violate project mitigation measures, or that represent unsafe or dangerous conditions. The inspector shall have the ability and authority to secure compliance with the conditions or standards through the City of Elk Grove Public Works Department, if necessary;

6. Acting in the role of contact for property owners or any other affected persons who wish to register observations of violations of project mitigation measures, or unsafe or dangerous conditions. Upon receiving any complaints, the inspector shall immediately contact the construction representative. The inspector shall be responsible for verifying any such observations and for developing any necessary corrective actions in consultation with the construction representative and the City of Elk Grove Public Works Department;

7. Maintaining prompt and regular communication with City staff;

8. Obtaining assistance as necessary from technical experts, such as archaeologists and wildlife biologists, to develop site-specific procedures for implementing the mitigation measures adopted by the City for the project. For example, it may be necessary at times for a wildlife biologist to work in the field with the inspector and construction contractor to explicitly identify and mark areas to be avoided during construction; and

9. Maintaining a log of all significant interactions, violations of permit conditions or mitigation measures, and necessary corrective measures.

Design Review and Plan Check

Many mitigation measures will be monitored via design review and plan check during implementation of multifamily development projects on the Housing Element Project sites. City staff will be responsible for monitoring plan check mitigation measures.

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	*TIMING/IMPLEMENTATION*	*ENFORCEMENT/ MONITORING*	*VERIFICATION OF COMPLIANCE*
Mitigation Measure 3.1-1 Exterior building materials on multifamily and nonresidential structures shall be composed of at least 50 percent low-reflectance non-polished surfaces. All bare metallic surfaces shall be painted with flat finishes to reduce reflected glare.	• Prior to issuance of building permits	City of Elk Grove Planning Department	
Mitigation Measure 3.2-1: As part of the City's design review and entitlement process, the City shall require subsequent development projects on the opportunity sites to comply with the City's Climate Action Plan and to prepare an Air Quality Mitigation Plan (AQMP) consistent with the requirements of SMAQMD. The AQMP shall include measures to reduce emissions for each subsequent project by 15%, or more if feasible. Measures may include, but are not limited to: • *Only natural gas burning fireplaces/hearths (i.e. no wood burning fireplaces/hearths shall be allowed).* • *Only low VOC paint (interior and exterior) and cleaning products shall be used on the individual housing site.* • *Residential dwellings shall be designed to exceed applicable Title 24 energy standards by 20%.* • *Install high efficiency appliances (refrigerator, fans, washers).* • *Streets shall be designed to maximize pedestrian access to transit stops.* • *Provide for on-site road and off-site bus turnouts, passenger benches and shelters as demand and service routes warrant subject to review and approval by local transportation planning agencies.* • *Safe and convenient bicycle and pedestrian paths/sidewalks connecting proposed residential uses to nearby trails, commercial land uses, and services.* • *Ensure that the final design includes:* o *A walkable design/improved pedestrian network (i.e.*	• Prior to approval of design review	City of Elk Grove Planning Department/ Sacramento Metropolitan Air Quality Management District	

Mitigation Measure	*Timing/Implementation*	*Enforcement/ Monitoring*	*Verification of Compliance*
walkways, paths, sidewalks, trails, etc.). o *Destination accessibility (connectivity to/from project amenities).* o *Increase transit accessibility (ensure that the minimum distance to a transit/bus facility is .25 miles).*			
Mitigation Measure 3.2-2: To reduce construction related emissions, the City shall require the project applicant of the individual housing sites to implement the following SMAQMD Basic Construction Emissions Control Measures: • *The following practices are considered feasible for controlling fugitive dust from a construction site. Control of fugitive dust is required by SMAQMD Rule 403 and enforced by SMAQMD staff.* o *Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.* o *Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.* o *Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.* o *Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).* o *All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.*	• Prior to approval of design review	City of Elk Grove Planning Department/ Sacramento Metropolitan Air Quality Management District	

Mitigation Measure	*Timing/Implementation*	*Enforcement/ Monitoring*	*Verification of Compliance*

• *The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel powered equipment. The California Air Resources Board enforces the idling limitations.*
  ○ *Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.*
• *Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.*
  ○ *Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.*			

Mitigation Measure 3.2-3: To reduce construction related emissions, the City shall require the project applicant of the individual housing sites to implement the following SMAQMD Enhanced Emission Control Measures: • *The project shall provide a plan for approval by the lead agency and SMAQMD demonstrating that the heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average. Acceptable options for*	• Submittal of plan and inventory prior to issuance of grading permits and/or approval of improvement plans. Adherence to measures throughout all grading and construction activities	City of Elk Grove Planning Department/ Sacramento Metropolitan Air Quality Management District	

Mitigation Measure	*Timing/Implementation*	*Enforcement/ Monitoring*	*Verification of Compliance*
reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The SMAQMD's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction. • *The project representative shall submit to the lead agency and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. The SMAQMD's Model Equipment List can be used to submit this information.* • *The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency and SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the*			

Mitigation Measure	*Timing/Implementation*	*Enforcement/ Monitoring*	*Verification of Compliance*
project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD, state or federal rules or regulations. • *If at the time of construction, the SMAQMD has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with the SMAQMD prior to construction will be necessary to make this determination.*			
Mitigation Measure 3.2-4: To reduce construction related emissions, the City shall require grading activities on the individual opportunity sites to have a maximum daily disturbed area (i.e., grading, excavation, cut and fill) that does not exceed 15 acres.	• Adherence to measure throughout all grading and construction activities	City of Elk Grove Planning Department	
Mitigation Measure 3.2-5: As part of the City's design review and entitlement process for Site C-34, the project applicant shall implement one of the following two measures: *1) Setback all dwelling units and outdoor recreation areas a minimum of 80 feet from the nearest travel lane of SR-99.* *2) Retain a qualified professional to perform a health risk assessment to determine potential impacts associated with exposure to Toxic Air Contaminants. If Toxic Air Contaminant exposure levels exceed acceptable levels or indicate a significant increase in cancer risk, the health risk assessment shall identify measures that the development project will implement to reduce exposure to acceptable levels. Potential measures include development setbacks (e.g., increased distance from SR-99), setbacks of ground*	• Prior to approval of design review	City of Elk Grove Planning Department	

Mitigation Measure	*Timing/Implementation*	*Enforcement/ Monitoring*	*Verification of Compliance*
floor units (e.g., use ground floor adjacent SR-99 for parking, storage, office space) if upper floor units are at acceptable exposure levels, indoor air filtration equipment, and disclosure statements to prospective buyers or renters notifying them of predicted health risks and identifying the importance of maintenance of any specialized equipment and keeping windows and doors shut during peak traffic periods).			
Mitigation Measure 3.4-1: Prior to the issuance of building permits, housing projects on the opportunity sites shall demonstrate compliance with the Climate Action Plan, including, but not limited to, measures BE-6, BE-7, BE-9, BE-10, RC-1, RC-2, TACM-5, and TACM-9.	• Prior to issuance of building permits	City of Elk Grove Planning Department	
Mitigation Measure 3.8-1:As part of the City's design review and entitlement process, the City shall require the following measures. *The following measures, when applicable, shall be followed throughout all phases of construction to reduce noise from construction activities and shall be the responsibility of the construction contractor and project applicant:* • *Construction equipment shall be well maintained and used judiciously to be as quiet as practical. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.* • *Use "quiet" models of air compressors and other stationary noise sources where technology exists.* • *Locate stationary noise-generating equipment and construction staging areas as far as feasible from sensitive receptors, including neighboring residential uses, when sensitive receptors adjoin or are near a construction area.*	• Adherence to measure throughout all grading and construction activities	City of Elk Grove Planning Department	

Mitigation Measure	*Timing/Implementation*	*Enforcement/ Monitoring*	*Verification of Compliance*
• *Prohibit unnecessary idling of internal combustion engines.* • *Designate a "construction liaison" who shall be responsible for responding to any local complaints about construction noise. The liaison shall determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the liaison at the construction site.* • *Hold a pre-construction meeting with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, construction schedule, and noise coordinator) are completed.*			
Mitigation Measure 3.8-2: As part of the City's design review and entitlement process, the City shall require the following measures for construction projects located less than 25 feet from existing structures: • *The pre-existing condition of any buildings within 25 feet of any construction activities shall be recorded in order to evaluate damage from project-related construction. Fixtures and finishes within a 25-foot radius of construction activities susceptible to damage shall be documented (photographically and in writing) prior to construction. All damage shall be repaired back to its pre-existing condition.* • *Should damage occur despite the above mitigation measures, construction operations shall be halted and the problem activity shall be identified. A qualified engineer shall establish vibration limits based on soil conditions and the types of buildings in the immediate area. The contractor shall monitor*	• Pre-existing condition of buildings within 25 feet of construction documented prior to start of construction. Adherence to measure throughout construction.	City of Elk Grove Planning Department	

Mitigation Measure	*Timing/Implementation*	*Enforcement/ Monitoring*	*Verification of Compliance*
the buildings throughout the remaining construction period and follow all recommendations of the qualified engineer to repair any damage that has occurred to the pre-existing state, and to avoid any further structural damage.			
Mitigation Measure 3.8-3: As part of the City's design review and entitlement process for housing Sites, the City shall require that sensitive exterior areas associated with future residential uses be located outside of the 60 dBA L_{dn} exterior traffic or railroad noise contour distances. If sensitive receptors are to be located within the 60 dBA L_{dn} exterior noise contour, outdoor activity areas shall be shielded from the noise source using site design measures such as building orientation or sound walls to maintain a 60 dBA L_{dn} (up to 65 dBA L_{dn} conditionally) exterior noise level for noise-sensitive exterior areas.	• Prior to approval of design review	City of Elk Grove Planning Department	

Mitigation Measure	*Timing/Implementation*	*Enforcement/ Monitoring*	*Verification of Compliance*
Mitigation Measure 3.8-4: As part of the City's design review and entitlement process for housing sites, the City shall require a project applicant to retain a qualified acoustical consultant to participate in the development of the final construction plans to ensure that sensitive residential buildings are designed with appropriate noise-attenuating construction features to maintain an acceptable interior noise level of 45 dBA L_{dn} at those habitable spaces exposed to exterior noise levels exceeding 60 dBA L_{dn} due to transportation noise sources. Feasible methods to achieve acceptable interior noise levels of 45 dBA L_{dn} may include site design techniques (orienting buildings away from significant noise sources, locating windows and doors on building walls that are not adjacent to the noise source, etc.) and/or building design techniques (various Sound Transmission Class (STC) rated sound dampening techniques, such as the installation of STC-rated windows; or employing the use of double-leaf partitions, noise insulation materials and/or resilient wall channels).	• Prior to approval of design review	City of Elk Grove Planning Department	
Mitigation Measure 3.8-5: As part of the City's design review and entitlement process for the housing element sites, the City shall require the Project Applicant to prepare and distribute a disclosure to all prospective occupants of the project describing the project's proximity to rail lines and the potential for train-related noise, including train warning horns: The disclosure shall specifically note that exterior areas may be exposed to periodic noise from warning horns.	• Through the design review and entitlement process	City of Elk Grove Planning Department	
Mitigation Measure 3.8-6: As part of the City's design review and entitlement process for multi-family sites, the City shall require forced-air mechanical ventilation for units throughout a multi-family residential project so that windows could be kept closed at the occupant's discretion to control interior noise and achieve the interior noise standard of 45 dBA L_{dn}. Closed windows typically provide 25 dBA of noise reduction.	• Prior to approval of design review	City of Elk Grove Planning Department	

MITIGATION MEASURE	*TIMING/IMPLEMENTATION*	*ENFORCEMENT/ MONITORING*	*VERIFICATION OF COMPLIANCE*
Mitigation Measure 3.8-7: As part of the City's design review and entitlement process for the housing element sites, the City shall require site design to implement measures to reduce exposure of adjacent uses to noise associated with mechanical equipment and on-site play areas through use of setbacks and/or barriers (e.g., placement of walls, buildings, parapets, or other structures between the noise source and adjacent sensitive receptors) to ensure that mechanical equipment associated with new development on Sites 1, 2, and 5 maintains an exterior noise level of 45 dBA Leq at on- and off-site recreation and yard areas.	• Prior to approval of design review	City of Elk Grove Planning Department	

ATTACHMENT 3 – EXHIBIT A
City of Elk Grove 2013-2021 Housing Element Update
General Plan Consistency Analysis

Map ID	Acres	Location	Does the Site Comply with the Criteria?							Clear of Known Site Constraints
			Compatible with surrounding land uses	Between 8-15 acres	MF not within 1/8 mile	Services nearby (today)	Major roads (existing)	Public transit (existing)	Pedestrian accessible (existing)	
Existing Sites										
1	15.3	North end of Lent Ranch	Y	Y	N	N	Y	N	Y	Y
2	12.4	East Franklin at SW corner of Quail Run Lane/Poppy Ridge Road and Bruceville Road	Y	Y	N	Y	Y	N	Y	Y
3	14	Laguna Ridge, SE corner of Poppy Ridge Road and Bruceville Road	Y	Y	N	Y	Y	N	Y	Y
4	9.58	Laguna Ridge, Bruceville Road just north of Bilby Road, just north of Seasons	Y	Y	Y	Y	Y	N	Y	Y
5	11.5	Laguna Ridge, between Whitelock Parkway and Poppy Ridge, next to future community park site	Y	Y	N	N	Y	N	N	Y
6	15	Waterman and Grant Line Road	Y	Y	N	N	Y	N	Y	Y
7	*This site number is not used.*									
7A	8.7	East Stockton just south of Sheldon	Y	Y	N	N (future)	Y	Y	Y	Interim detention basin being relocatated
Existing Overlay Sites										
8	4.65	TOD site, SW corner of Sheldon and Elk Grove Florin	Y	>	N	Y	Y	Y	N	Floodplain issues; final station siting unresolved
9	4.56									
10	5.04									
11	5.18									
12	2	NW corner of Laguna Blvd and Big Horn Road	Y	N	Y	Y	Y	Y	Y	Y

ATTACHMENT 3 – EXHIBIT A
City of Elk Grove 2013-2021 Housing Element Update
General Plan Consistency Analysis

Map ID	Acres	Location	Does the Site Comply with the Criteria?							Clear of Known Site Constraints
			Compatible with surrounding land uses	Between 8-15 acres	MF not within 1/3 mile	Services nearby (today)	Major roads (existing)	Public transit (existing)	Pedestrian accessible (existing)	
Candidate Sites										
C-1	8.68	East Stockton Blvd just north of Sheldon Road	Y	Y	N	N	Y	Y	Y	Y
C-2	6.50	NW corner of Big Horn and Bruceville Road	Y	Y	N	Y	Y	Y	Y	Laguna Creek; some area available to develop
C-3	*This site number is not used.*									
C-4	*This site number is not used.*									
C-5	*This site number is not used.*									
C-6	6.97	Laguna West Town Center	Y	N	Y	Y	Y	Y	Y	Y
C-7	5.56	Laguna West Town Center	Y	N	Y	Y	Y	Y	Y	Y
C-8	6.31	Calvine Road east of Elk Grove Florin Road	Y	N	N	Y	Y	Y	Y	Y
C-9	7.97	Brown Road, south of Calvine Road near Elk Grove Florin Road	N	Y	N	Y	N	N	N	Potential floodplain issues
C-10	7.49	Stonelake, West Taron at Riparian	Y	N	N	Y	Y	Y	Y	Y
C-11	*This site number is not used.*									
C-12	n/a	Southeast Policy Area	Y	Y	N/A	N	N (future)	N (future)	N (future)	
C-13	3.91	Laguna West Town Center	Y	N	Y	Y	N	Y	Y	Y
C-14	3.92	Laguna West Town Center	Y	N	Y	Y	N	Y	Y	Y

ATTACHMENT 3 – EXHIBIT A
City of Elk Grove 2013-2021 Housing Element Update
General Plan Consistency Analysis

Map ID	Acres	Location	Does the Site Comply with the Criteria?							Clear of Known Site Constraints
			Compatible with surrounding land uses	Between 8-15 acres	MF not within 1/3 mile	Services nearby (today)	Major roads (existing)	Public transit (existing)	Pedestrian accessible (existing)	
C-15	2.96	Willard Parkway at Bilby Road	N	Y	N	N	Y	N	Y	Historic resources on site
C-16	3.35									
C-17	2.68									
C-18	9.5	Laguna Ridge, SW corner of Poppy Ridge and Big Horn	Y	Y	N	N	N (future)	N	N (future)	Y
C-19	0.9									
C-20	1.6									
C-21	4.41	Elk Grove Florin Road just south of Calvine	Y	N	Y	Y	Y	Y	N (future)	Y
C-22	12.61	Brown Road, south of Calvine Road near Elk Grove Florin Road	N	Y	Y	Y	N	Y	N	Y
C-23	18.23	Sheldon Road at Vytina Drive	Y	>	N	N	Y	N	Y	Y
C-24	16.26	Elk Grove Boulevard near Laguna Springs Drive (Capital Nursery site)	Y	>	N	Y	Y	Y	Y	Historic resources on site; floodplain issues at the north end
C-25	3.39	Elk Grove Boulevard at Backer Ranch (next to Nugget)	Y	N	Y	Y	Y	Y	Y	Y
C-26	5.21	Stonelake, West Taron at Elk Grove Boulevard	Y	N	N	Y	Y	Y	Y	Y
C-27	9.40	Maritime, just west of Harbor Point	Y	Y	Y	Y	Y	Y	Y	Y
C-28	2.63	Laguna West Town Center	Y	N	Y	Y	Y	Y	Y	Y

ATTACHMENT 3 – EXHIBIT A
City of Elk Grove 2013-2021 Housing Element Update
General Plan Consistency Analysis

Map ID	Acres	Location	Does the Site Comply with the Criteria?							Clear of Known Site Constraints
			Compatible with surrounding land uses	Between 8-15 acres	MF not within 1/3 mile	Services nearby (today)	Major roads (existing)	Public transit (existing)	Pedestrian accessible (existing)	
C-29	2.0	Laguna West Town Center	Y	N	Y	Y	Y	Y	Y	Y
C-30	2.93	Laguna West Town Center	Y	N	Y	Y	Y	Y	Y	Y
C-31	3.0	Harbour Point at Maritime	Y	N	Y	Y	Y	Y	Y	Y
C-32	3.2	Elk Grove Boulevard, just west of Carlton Plaza	Y	N	Y	Y	Y	Y	Y	Y
C-33	9.8	East Stockton Boulevard at Bow Street	Y	Y	Y	N (future)	Y	Y	Y	Y
C-34	8.14	East Stockton Boulevard south of Bond Road, just north of Premier West Bank	Y	Y	Y	Y	Y	Y	N	Y
C-35	3.74	East Stockton Boulevard at Banff Vista Drive	Y	N	Y	N	Y	Y	Y	Y
C-36	2.97	East Stockton Boulevard just south of Elk Grove Boulevard	Y	N	Y	Y	Y	Y	Y	Y
C-37	4.34	East Stockton Boulevard at Hampton Oak Drive	Y	N	Y	N	Y	Y	Y	Y
C-38	*This site number is not used.*									
C-39	6.44	Laguna Boulevard and Bruceville Road	Y	N	Y	Y	Y	Y	Y	Y
C-40	10.34	East Stockton Boulevard south of Calvine	Y	Y	Y	N	Y	Y	Y	Y
C-41	15.0	Sheldon/Bruceville/ Big Horn/Lewis Stein	Y	Y	Y	Y	Y	Y	Y	Laguna Creek; some area available to develop