

RESOLUTION NO. 2014-12

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE
CERTIFYING A SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE
MOORE SHELDON CENTER PROJECT, EG-11-033
ASSESSOR PARCEL NUMBERS: 115-0150-064 AND 115-0150-067**

WHEREAS, the Planning Department of the City of Elk Grove received an application on October 12, 2011 from J. Gilbert Moore (the "Applicant") requesting a General Plan Amendment, Rezoning, Major Design Review, Conditional Use Permit, Minor Deviation, and Minor Uniform Sign Program for the Moore Sheldon Center Project (the "Project"); and

WHEREAS, the proposed Project is located on real property in the incorporated portions of the City of Elk Grove more particularly described as APN: 115-0150-064 and 067; and

WHEREAS, the California Environmental Quality Act (CEQA), requires local agencies to consider the potential environmental impacts of their decisions prior to taking action; and

WHEREAS, the State CEQA Guidelines (Title 14 of the California Code of Regulations) identify several types of environmental impact reports (EIRs), each applicable to different Project circumstances. CEQA Guidelines Section 15162(a) provide that a Subsequent EIR (SEIR) is warranted if the lead agency determines, among other things, that substantial changes have occurred to a Project, or the circumstances under which the Project will be undertaken, that will have one or more significant effects not discussed in the previous EIR; 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 April 19, 2013 with the comment period ending on May 20, 2013; and,

WHEREAS, the City of Elk Grove distributed a Notice of Availability for the Project's Draft EIR on September 20, 2013, which started the 45-day public review period, ending on November 4, 2013; and,

WHEREAS, the Draft SEIR, provided herein as Exhibit A, was filed with the State Clearinghouse (SCH No. 2012122013) and was distributed to public agencies and other interested parties for public review and comment; and,

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

- A. The City Council hereby certifies that the Final SEIR has been completed in compliance with the requirements of the California Environmental Quality Act.
- B. The City Council hereby certifies that the Final SEIR was presented to the City Council and that the City Council reviewed and considered the information contained in the Final SEIR prior to taking action on the Project.
- C. The City Council hereby certifies that the Final SEIR reflects the independent judgment and analysis of the City Council.

2. Findings on Impacts

The City Council finds that the Final SEIR 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 is 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 SEIR 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 22nd day of January 2014.




GARY DAVIS, MAYOR of the
CITY OF ELK GROVE

ATTEST:



JASON LINDGREN, CITY CLERK

APPROVED AS TO FORM:



JONATHAN P. HOBBS,
CITY ATTORNEY

EXHIBIT A

**MOORE SHELDON RETAIL CENTER
PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT**

SCH No. 2012122013



Prepared by:

CITY OF ELK GROVE
8401 LAGUNA PALMS WAY
ELK GROVE, CA 95758

SEPTEMBER 2013

MOORE SHELDON RETAIL CENTER PROJECT
DRAFT SUBSEQUENT
ENVIRONMENTAL IMPACT REPORT

SCH No. 2012122013

Prepared by:
CITY OF ELK GROVE
8401 LAGUNA PALMS WAY
ELK GROVE, CA 95758

SEPTEMBER 2013

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ES EXECUTIVE SUMMARY

This section provides an overview of the Project and the environmental analysis. For additional detail regarding specific issues, please consult the appropriate chapter of Section 3.0 Environmental Setting, Impacts, and Mitigation Measures.

ES.1 PURPOSE AND SCOPE OF THE EIR

The California Environmental Quality Act (CEQA) requires the preparation of an environmental impact report (EIR) when there is substantial evidence that a Project could have a significant effect on the environment. The purpose of an EIR is to provide decision-makers, public agencies, and the general public with an objective and informational document that fully discloses the potential environmental effects of the proposed Project. The term "proposed Project," as used in this EIR, refers to the development of the Moore Sheldon Center Project. The EIR process is specifically designed to describe the objective evaluation of potentially significant direct, indirect, and cumulative impacts of the proposed Project; to identify alternatives that reduce or eliminate the Project's significant effects; and to identify feasible measures that mitigate significant effects of the Project. In addition, CEQA requires that an EIR identify those adverse impacts determined to remain significant after mitigation. This EIR provides an analysis of the potential environmental effects associated with the implementation of the Project, located in the City of Elk Grove.

This EIR has been prepared as a Subsequent EIR (SEIR) to the Sheldon/99 GPA and Rezone EIR, pursuant to CEQA Guidelines Section 15162. The City determined that because the proposed Project requests changes to land uses previously analyzed for environmental effects in the Sheldon/99 GPA and Rezone EIR, an SEIR was necessary for the proposed Project.

ES.2 PROJECT CHARACTERISTICS

The proposed Project proposes the construction of approximately 27,430 square feet of commercial land uses on 4.46 acres. The commercial land uses would consist of the following: an 1,800-square-foot office building located along Sheldon Road; a gas station with eight fuel dispensers under a canopy and associated underground fuel storage tanks adjacent to Sheldon Road; a 3,061-square-foot car wash; a 4,580-square-foot restaurant; a 4,580-square-foot building with a drive-through lane located on the northern border of the project site; and a 13,409-square-foot commercial building that includes the following:

- a fast food restaurant (4,100 square feet) with a drive-through located to the east
- a convenience store (6,554 square feet)
- a deli shop (1,160 square feet)
- a wine/liquor shop (720 square feet)
- a yogurt shop (875 square feet)

In addition, the proposed Project includes a new masonry sound wall on the north end of the Project site beyond the drive-through lane; three patios; 109 parking spaces and bicycle parking; and on-site signage.

ES EXECUTIVE SUMMARY

The following objectives have been identified for the proposed Project:

- Provide a retail project within one quarter to one half mile of a major freeway interchange.
- Maximize development potential for the project.
- Provide a mix of retail/office uses that are the highest and best use for the Project location.
- Develop at a density that allows adequate parking and on-site circulation to serve proposed uses.

ES.3 PROJECT ALTERNATIVES SUMMARY

Pursuant to CEQA Guidelines Section 15126.6, Project alternatives are developed to reduce or eliminate the significant or potentially significant adverse environmental effects identified as a result of the proposed Project, while still meeting most if not all of the basic Project objectives. The proposed Project would not result in any new or substantially increase the severity of the significant impacts identified in the Sheldon/99 GPA and Rezone EIR. Therefore, the project alternatives discussion provided in Section 4.4 of this SEIR is limited to a summary of those alternatives analyzed in the Sheldon/99 GPA and Rezone EIR and a brief analysis of those alternatives relative to the proposed project. The Sheldon/99 GPA and Rezone EIR analyzed the following alternatives:

- Alternative 1 – No Project Alternative
- Alternative 2 – Reduced Residential Density Alternative
- Alternative 3 – Open Space Alternative
- Alternative 4 – Reduced Commercial Alternative

The Open Space Alternative would be the environmentally superior alternative.

ES.4 AREAS OF CONTROVERSY

The City of Elk Grove was identified as the lead agency for the proposed Project. In accordance with Section 15082 of the CEQA Guidelines, the City prepared and distributed a Notice of Preparation (NOP) of an EIR on April 19, 2013. This notice was circulated to the public, local, state, and federal agencies, and other interested parties to solicit comments on the proposed Project. The NOP is presented in **Appendix B**. An Initial Study was prepared for the project and released for public review at the same time as the NOP. The Initial Study is also included in **Appendix B**.

Concerns raised in response to the NOP were considered during the preparation of this SEIR. Comment letters are presented in **Appendix B**.

Issues raised in comment letters on the NOP include:

- *Context* and the relationship between the proposed Project and Sheldon/99 GPA and Rezone EIR.

- Commercial uses were not previously included in the light and glare analysis.
- Service vehicles effects on air quality.
- Storage of gasoline on the Project site.
- The effect of proposed land use changes on the established community and potential conflict with adjacent existing low-density residential land uses.
- Drive-through speaker noise.
- Effectiveness of sound walls.
- State highway system standard of significance.
- Egress and ingress impacts on roadway network operations.
- TRC comments on the Traffic Impact Study (TIS) prepared by Fehr & Peers in March 2012 regarding the California Department of Transportation standard of significance, figure consistency with appendices, and feasibility and effectiveness of mitigation measures.

ES.5 SUMMARY OF ENVIRONMENTAL IMPACTS

Table ES-1 presents a summary of Project impacts and proposed mitigation measures that would avoid or minimize potential impacts. The proposed Moore Sheldon Center Project is subject to the adopted mitigation measures described in the Mitigation Monitoring and Reporting Program (MMRP) for the Sheldon/99 GPA and Rezone EIR. In the table, the level of significance of each environmental impact is indicated for the Sheldon/99 GPA and Rezone and the proposed project. The table also includes any additional mitigation for the proposed Project, if applicable, the resulting level of significance and a determination of whether the proposed project would result in a new or more severe impact from that disclosed in the previous EIR.

For detailed discussions of all Project impacts and mitigation measures, the reader is referred to the topical environmental analysis in Section 3.0.

TABLE ES-1
PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
3.1 Aesthetics and Visual Resources					
3.1.1 The proposed Project would convert the existing rural residential visual character to developed urban uses, which would substantially alter the current views of the site to travelers on the surrounding arterial roadways. However, this change was considered in the previous document and was found to be significant and unavoidable. The proposed Project's effect on visual character would not substantially increase the degree of the visual character impact previously disclosed in the Sheldon/99 GPA and Rezone Project EIR.	SU	S	None available.	SU	No
3.1.2 The proposed Project, in combination with other approved and proposed projects, would contribute to the alteration of visual character and the incremental creation of cumulative light and glare in the northern portion of Elk Grove and the surrounding area. The proposed Project would not substantially increase the impact from what was previously disclosed in the Sheldon/99 GPA and Rezone Project EIR.	LCC	LCC	None required.	LCC	No
3.2 Air Quality					

N – No new or substantially more severe impact
SU – Significant and Unavoidable

LS – Less Than Significant
LCC – Less Than Cumulatively Considerable

PS – Potentially Significant

S – Significant
CC – Cumulatively Considerable

Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
<p>3.2.1 Construction activities associated with the development of the proposed Project would generate fewer potential criteria air pollutants than the SMAQMD significance thresholds, and would comply with the construction mitigations identified in the Sheldon/99 GPA and Rezone EIR. The proposed Project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. Therefore, construction-related air quality impacts will be considered less than significant.</p>	LS	LS	None required.	LS	No
<p>3.2.2 Implementation of the proposed Project will result in long-term increases in criteria air pollutants that are below the threshold levels identified by the SMAQMD. This change increase considered in the previous document and was found to be significant and unavoidable. The proposed Project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts from the Sheldon/99 GPA and Rezone EIR.</p>	SU	LS	None required.	LS	No
<p>3.2.3 Implementation of the proposed Project would not contribute to localized concentrations of mobile-source CO that would exceed applicable standards. As such, the proposed Project would</p>	—	LS	None required.	LS	No

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ES EXECUTIVE SUMMARY

Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
not exceed the SMAQMD's significance thresholds for carbon monoxide and this would be considered a less than significant impact .					
3.2.4 Implementation of the proposed Project would not result in increased exposure of sensitive receptors to mobile-source toxic air contaminants; therefore, the proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.	LS	LS	None required.	LS	No
3.2.5 Implementation of the proposed Project would not result in increased exposure of sensitive receptors to odorous emissions. As a result, the proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.	LS	LS	None required.	LS	No
3.2.6 Implementation of the proposed Project, in combination with growth throughout the air basin, will not exacerbate existing regional problems with ozone and particulate matter. The proposed Project would not result in a new significant cumulative impact or substantially increase the severity of a previously identified significant impact.	SU	LCC	None required.	LCC	No
3.3 Greenhouse Gases and Climate Change					
3.3.1 Implementation of the proposed Project	CC/SU	PS	MM 3.3.1	LCC	No

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 SU – Significant and Unavoidable*

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 LCC – Less Than Cumulatively Considerable*

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 CC – Cumulatively Considerable*

Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
<p>is consistent with CAP forecasts and would incorporate standards in the Climate Action Plan as mitigation measures. This Project would be required to implement existing City codes and policies, in addition to the applicable mitigations of the CAP. There is no new or substantially more severe significant impact from the proposed Project. Therefore, based on consistency with the Climate Action Plan, this impact is less than cumulatively considerable.</p>			<p>Prior to building permit approval, the City of Elk Grove Planning Department shall require that the Project applicant implement the following measures to reduce emissions of GHGs associated with the proposed Project, based on the referenced measures from the City's CAP and City of Elk Grove Municipal Code:</p> <ul style="list-style-type: none"> • All buildings constructed shall achieve Tier 1 of Title 24, Part 1 green building standards to exceed minimum Title 24 energy efficiency standards by 15 percent, consistent with CAP Measure BE-6. • The proposed Project shall provide prewiring or conduit for solar photovoltaic (PV) in each proposed building, consistent with CAP Measures BE-10. The intent of prewiring for solar PV systems is to reduce barriers to later installation of on-site solar PVs. The proposed Project may also satisfy the intent of this mitigation by installing on-site solar PV systems. • The Project shall provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas, 		

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ES EXECUTIVE SUMMARY

Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
			<p>consistent with CAP measure RC-1. Composting of a limited amount of food waste that may be generated as a byproduct of on-site food preparation shall be completed by agreement with a waste hauler. Cooking oils shall be directed off site for reuse.</p> <ul style="list-style-type: none"> • All parking lots for shopping centers or office developments constructed as part of the proposed Project shall include designated carpool parking spaces near store entries, implementing CAP Measure TACM-3. • The Project applicant shall provide bicycle parking at a ratio of one bicycle parking space per 20 vehicle parking spaces, consistent with CAP Measure TACM-5. Provision of additional bicycle support facilities such as lockers and shower facilities, consistent with voluntary CAP Measure TACM-5, may qualify the applicant for eligibility to request a reduction in the minimum number of parking spaces required, pursuant to Elk Grove Municipal Code Sections 23.58.060 and 23.16.037. 		

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Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
			<ul style="list-style-type: none"> • During the design review process, the applicant shall demonstrate compliance with CAP Measure TACM-5 by showing an analysis of office and mixed-use building connections and orientation to pedestrian paths, bicycle paths, and existing transit stops within a half mile of the project site. As feasible, all such Project components shall orient Project toward an existing transit, bicycle, or pedestrian corridor with minimum setbacks, or support equivalent pedestrian, bicycle, or alternative transportation through other methods. • The proposed Project shall minimize setbacks from the street, provide pedestrian pathways, and use design features for entrances and parking lots to encourage pedestrian access and safety between transit facilities, consistent with CAP Measure TACM-5. • Indoor water conservation measures shall be incorporated, such as use of low-flow toilets, urinals, and faucets. 		

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Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
			<ul style="list-style-type: none"> The Project shall ensure that low-water-use landscaping (i.e., drought-tolerant plants and drip irrigation) is installed. At least 75 percent of all landscaping plants shall be drought-tolerant as determined by a licensed landscape architect or contractor and in conformance with Chapters 14.10 and 23.54 of the Elk Grove Municipal Code. 		
3.4 Noise					
<p>3.4.1 Implementation of the proposed Project would not result in significant increases in traffic noise levels. The proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact from what was previously disclosed in the Sheldon/99 GPA and Rezone Project EIR.</p>	LS	LS	None required.	LS	No
<p>3.4.2 The Sheldon/99 GPA and Rezone EIR determined that noise generated by commercial uses could affect sensitive receptors, which was reduced to less than significant with Sheldon/99 GPA and Rezone EIR mitigation measure MM 4.6.3. Exposure to noise levels generated by future on-site stationary sources associated with the proposed Project could exceed the City's noise</p>	LS	PS	<p>MM 3.4.2</p> <p>The following noise reduction methods shall be incorporated into the Project design to reduce noise levels and achieve compliance with the City's exterior noise level limits.</p> <ul style="list-style-type: none"> An 8-foot-tall sound wall, constructed with rough, split-face concrete block, shall be 	LS	No

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Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
<p>standards at noise-sensitive land uses. This impact would be reduced to less than significant with mitigation. The proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.</p>			<p>constructed along the north property line of the Project site.</p> <ul style="list-style-type: none"> • Loading and delivery activities which require the use of semi-trucks shall be limited to daytime (7:00AM to 10:00PM) hours. • Individual vacuums shall be limited to a maximum sound level of 72 dBA at a distance of 10 feet. • Car wash and vacuum stations shall be limited to daytime (7:00AM to 10:00PM) hours only. • Rooftop mechanical equipment shall be shielded from view by building parapets and/or rooftop mechanical screen barriers. • The City Planning Department will confirm these measures are incorporated into the design prior to issuance of building permits. 		

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ES EXECUTIVE SUMMARY

Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
<p>3.4.3 Exposure to groundborne vibration levels would not exceed applicable standards at nearby existing or proposed land uses. Therefore, short-term groundborne vibration impacts would be considered a less than significant impact. The proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.</p>	LS	LS	None required.	LS	No
<p>3.4.4 Implementation of the proposed Project would not result in a significant contribution to cumulative noise levels at nearby land uses. This is a less than cumulatively considerable impact.</p>	LCC	LCC	None required.	LCC	No
3.5 Traffic and Circulation					
<p>3.5.1 Implementation of the Project would result in a decline in operations at various intersections, roadway segments, and freeway facilities.</p> <p>Study roadway segments would continue to operate at acceptable levels of service of LOS A or LOS B under Existing Plus Project conditions which would be considered a less than significant impact.</p> <p>Freeway trips generated on the study freeway segments by the Project would be considered a less than significant impact.</p>	SU	LS	None required.	LS	No

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Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
<p>The significant and unavoidable decline in intersection operations was considered by the Elk Grove City Council for the Sheldon/99 GPA and Rezone Project. The proposed Project's effect on intersections, roadway segments, and freeway facilities would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.</p>					
<p>3.5.2 Implementation of the Project would result increase the demand on the circulation system, including the roadway network, mass transit, and bicycle and pedestrian facilities. However, the Project would not disrupt or interfere with existing or planned transit operations or facilities. Since the Project would not conflict with plans establishing the effectiveness of the performance of the circulation system, this would be considered a less than significant impact.</p>	LS	LS	None required.	LS	No
<p>3.5.3 Implementation of the Project, combined with other development in the area, would decrease operations at various intersections, roadway segments and freeway facilities under Cumulative Plus Project conditions.</p> <p>This unacceptable level of service is consistent with the Sheldon/99 GPA and</p>	CC/SU	PS	<p>MM 3.5.3</p> <p>The Project applicant shall pay a fair-share contribution toward the installation of a right-turn overlap phase on the southbound approach to the Sheldon Road/East Stockton Boulevard intersection.</p> <p>Payment of the fee shall be collected prior to issuance of building permit. Roadway</p>	LCC	No

N – No new or substantially more severe impact
 SU – Significant and Unavoidable

LS – Less Than Significant
 LCC – Less Than Cumulatively Considerable

PS – Potentially Significant

S – Significant
 CC – Cumulatively Considerable

ES EXECUTIVE SUMMARY

Impact	Previous EIR Level of Significance	Proposed Project Level of Significance	Mitigation Measure	Resulting Level of Significance	New or More Severe Impact from Previous EIR?
<p>Rezone EIR, which was previously disclosed to be cumulatively considerable and a significant and unavoidable impact. However, the increase in V/C ratio with the Project would be less than 0.05. Therefore, while the contribution of trips from development of the entire Sheldon/99 GPA and Rezone project would remain significant, the trips generated on study roadway segments by the Project would not be cumulatively considerable and this would be considered a less than significant cumulative impact. The Project's contribution would not result in new significant impacts or substantially increase the severity of previously identified significant impacts.</p>			<p>improvements shall be constructed prior to issuance of final occupancy.</p>		

*N – No new or substantially more severe impact
 SU – Significant and Unavoidable*

*LS – Less Than Significant
 LCC – Less Than Cumulatively Considerable*

PS – Potentially Significant

*S – Significant
 CC – Cumulatively Considerable*

1.0 INTRODUCTION

1.1 PURPOSE

This Draft Subsequent Environmental Impact Report (Draft SEIR) has been prepared in conformance with the California Environmental Quality Act (CEQA) to evaluate the environmental impacts associated with the Moore Sheldon Center Project (proposed Project). CEQA requires the preparation of an EIR prior to approving any project that may have a significant effect on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action that 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)). With respect to the proposed Project, the City of Elk Grove has determined that the proposed development is a project within the definition of CEQA.

The City, acting as the lead agency, has prepared this Draft SEIR to provide the public and responsible and trustee agencies with information about the potential environmental effects of the proposed Project. As described in CEQA Guidelines Section 15121(a), an EIR is a public informational document that assesses potential environmental effects of the proposed Project and identifies mitigation measures that could reduce or avoid its adverse environmental impacts. Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development, where feasible, and are obligated to balance a variety of public objectives, including economic, environmental, and social factors.

This section summarizes the purpose of the EIR; describes the environmental procedures that are to be followed according to state law; discusses the intended uses of the EIR; discusses the Project's relationship to City documents; and describes the EIR's scope and organization, contact person, and impact terminology.

1.2 TYPE OF DOCUMENT

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. As described in CEQA Guidelines Section 15162(a), "when an EIR has been certified . . . no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, that substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects." This Draft SEIR has been prepared as a Subsequent EIR (SEIR) to the Sheldon/99 GPA and Rezone EIR, pursuant to CEQA Guidelines Section 15162. The City determined that because the proposed Project requests changes to land uses previously analyzed for environmental effects in the Sheldon/99 GPA and Rezone EIR, an SEIR was necessary for the proposed Project.

The analysis associated with an SEIR focuses on substantial changes proposed in a project that require major revisions of a previous EIR due to either the identification of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

1.3 TYPE OF EIR AND INTENDED USES OF THE EIR

The Sheldon/99 GPA and Rezone EIR is a program EIR, which is an EIR prepared for a series of actions that can be characterized as one large project and are related. A program EIR, such as the Sheldon/99 GPA and Rezone EIR, is appropriate for land use decision-making at a broad level that contemplates further, site-specific review of individual development proposals.

1.0 INTRODUCTION

According to CEQA Guidelines Section 15168(d), a program EIR can be used to simplify the task of preparing environmental documents on later parts of the program.

The Sheldon/99 GPA and Rezone EIR assessed the environmental impacts resulting from the construction and operation of the Sheldon/99 GPA and Rezone project and identified mitigation measures to minimize potential adverse environmental impacts.

As noted above, this is a Draft SEIR and provides an analysis of environmental effects specifically associated with the proposed Project, in light of the environmental analysis provided in the Sheldon/99 GPA and Rezone EIR. Consistent with CEQA Guidelines Section 15162, this Draft SEIR addresses environmental effects that are particular to the Project and utilizes mitigation measures, which are based on adopted Sheldon/99 GPA and Rezone project development policies and standards, to mitigate anticipated impacts.

This Draft SEIR will be used by the City as a tool in evaluating the environmental impacts of the proposed Project. As the lead agency under the provisions of CEQA, the City of Elk Grove has discretionary approval authority and the responsibility to consider the environmental effects of the Project. This Draft SEIR is intended to evaluate the environmental impacts of the Project to the greatest extent possible. This Draft SEIR will be used as the primary environmental document to evaluate all planning and permitting actions associated with the Project.

- Approval of an amendment to the General Plan to change the land use designation of parcel 115-0150-064 from High Density Residential (HDR) to Commercial.
- A Rezone to change parcel 115-0150-064 (approximately 2.58 acres) from a zoning of RD-20 (High Density Residential 20 dwelling units per acre [du/ac]) to a zoning of General Commercial (GC) and to change parcel 115-0150-067 (approximately 1.88 acres) from a zoning of Limited Commercial (LC) to General Commercial (GC).
- Approval of a Tentative Parcel Map to subdivide the two properties into five parcels.
- Approval of a Conditional Use Permit to allow the operation of a drive-through restaurant and service station.
- Design Review for the construction of commercial uses on the Project site.

1.4 RELATIONSHIP TO THE CITY OF ELK GROVE GENERAL PLAN AND SHELDON/99 GPA AND REZONE PROJECT

GENERAL PLAN

The General Plan, adopted in 2003 and amended through July 2009, 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 provides policy direction that guides land use development within the City and provides protection for existing natural resources. Previous programmatic environmental review for the land use designations, policies, and actions associated with the General Plan was included in the Elk Grove General Plan EIR (SCH No. 2002062082). The General Plan EIR analyzed the environmental impacts associated with buildout of the City under the land uses and densities allowed by the General Plan. Where feasible, the City adopted mitigation measures to reduce impacts to an acceptable level of significance. Significant and unavoidable impacts identified

in the General Plan EIR were addressed by the City in the General Plan EIR, and a Statement of Overriding Considerations was adopted with the certification of the General Plan EIR.

The Project site is currently designated High Density Residential and Commercial in the General Plan. The proposed Project requests a General Plan amendment to change the High Density Residential land use designation to Commercial. See Section 2.0, Project Description, for additional information regarding Project components.

SHELDON/99 GPA AND REZONE PROJECT

The Project area is included as part of the Sheldon/99 GPA and Rezone project area and was examined under the Sheldon/99 GPA and Rezone EIR (SCH No. 2007122045), certified February 2009. The Sheldon/99 GPA and Rezone project was initiated by the Elk Grove City Council in August 2006, after a citywide office and retail analysis indicated that the Sheldon Road/SR 99 Interchange Reconstruction project, which was approved in 2005, would cause several parcels east of the Sheldon Road/SR 99 interchange to have increased commercial potential as a result of the interchange improvements and realignment of East Stockton Boulevard. The proposed Moore Sheldon Center Project is subject to the adopted mitigation measures described in the Mitigation Monitoring and Reporting Program (MMRP) for the Sheldon/99 GPA and Rezone EIR.

All documents associated with the Sheldon/99 GPA and Rezone project are available for review at the City of Elk Grove, Development Services – Planning, 8401 Laguna Palms Way, Elk Grove, CA 95758. The adopted MMRP for this document is included in **Appendix A** of this Draft SEIR.

1.5 EIR SCOPE AND ORGANIZATION

Sections 15122 through 15132 of the 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 unavoidable environmental changes, growth-inducing impacts, and cumulative impacts. The environmental issues addressed in this Draft SEIR were established through review of prior environmental documentation developed for the site, environmental documentation for nearby projects, and public and agency responses to the Notice of Preparation (NOP).

Sections 3.1 through 3.5 in this Draft SEIR provide the setting, environmental impacts, and mitigation measures for each of the environmental issue areas addressed. Potential effects of implementing the proposed Project are identified, including cumulative effects, along with mitigation measures recommended to reduce identified impacts. This Draft SEIR provides an analysis of environmental effects specifically associated with the proposed Project in light of the environmental analysis provided in the Sheldon/99 GPA and Rezone EIR.

Cumulative environmental effects of the proposed Project are generally based on information provided in the Sheldon/99 GPA and Rezone EIR; however, this information is supplemented with specifics from the proposed Project's contribution to the cumulative condition and updated information.

The City determined the scope for this Draft SEIR based on the Notice of Preparation/Initial Study, comments in response to the NOP, agency consultation, and review of the Project application. Based on this information, the City determined that this Draft SEIR is to address aesthetics, air quality, greenhouse gas emissions and climate change, noise, and traffic.

This Draft SEIR is organized in the following manner:

1.0 INTRODUCTION

SECTION ES – EXECUTIVE SUMMARY

This section summarizes the characteristics of the proposed Project and provides a concise summary matrix of the Project's environmental impacts and associated mitigation measures.

SECTION 1.0 – INTRODUCTION

Section 1.0 provides an introduction and overview describing the intended use of the EIR and the review and certification process.

SECTION 2.0 – PROJECT DESCRIPTION

This section provides a detailed description of the proposed Project, including intended objectives, background information, and physical and technical characteristics.

SECTION 3.0 – ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

Section 3.0 provides an introduction to the general assumptions used in the Project-specific and cumulative environmental analysis.

Subsections 3.1 through 3.5 contain an analysis of environmental topic areas as *identified below*. Each subsection contains a description of the existing setting of the Project area, identifies standards of significance, identifies Project-related impacts, and recommends mitigation measures.

The following major environmental topics are addressed in this section:

- 3.1 Visual Resources/Aesthetics
- 3.2 Air Quality
- 3.3 Greenhouse Gases and Climate Change
- 3.4 Noise
- 3.5 Traffic and Circulation

SECTION 4.0 – OTHER CEQA CONSIDERATIONS

This section contains discussions and analysis of various topical issues mandated by CEQA. It provides a discussion of cumulative impacts, significant and unavoidable impacts, Project alternatives, and growth-inducing impacts, as discussed below.

Growth-Inducing Implications of the Project – Contains discussions and analysis of growth-inducing impacts of the Project as mandated by State CEQA Guidelines Section 15126.2.

Significant and Unavoidable Impacts – CEQA requires that the significant and unavoidable impacts associated with the proposed Project are disclosed. The Project would not result in any significant and unavoidable impacts.

Project Alternatives – State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the Project that could feasibly attain most of the basic objectives of the Project while avoiding and/or lessening any of the significant environmental effects of the Project. Because the proposed Project would not result in any new significant impacts or substantially increase the severity of the significant impacts identified in the Sheldon/99 GPA and Rezone EIR, the project alternatives discussion provided in Section 4.4 of this SEIR is limited to a summary of those alternatives analyzed in the Sheldon/99 GPA and Rezone EIR and a brief analysis of those alternatives relative to the proposed Project.

1.6 ENVIRONMENTAL REVIEW PROCESS

NOTICE OF PREPARATION AND INITIAL STUDY

In accordance with Section 15082 of the CEQA Guidelines, the City prepared a Notice of Preparation (NOP) of an EIR for the Project on April 19, 2013. This notice was circulated to the public, local, state, and federal agencies, and other interested parties to solicit comments on the Project. An Initial Study (IS) for the Project was prepared and released for public review along with the NOP. Its conclusions supported preparation of an EIR for the Project. The NOP and Initial Study are presented in **Appendix B**. The City held a scoping meeting on May 9, 2012.

DRAFT SEIR PUBLIC NOTICE/PUBLIC REVIEW

This document constitutes the Draft Subsequent EIR (Draft SEIR). The Draft SEIR contains a description of the Project, description of the environmental setting, identification of Project impacts, and mitigation measures for impacts found to be potentially significant. Upon completion of the Draft SEIR, the City will file the Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (Public Resources Code Section 21161).

Concurrent with the NOC, the City will provide public notice of the availability of the Draft SEIR for public review and invite comment from the general public, agencies, organizations, and other interested parties. The public review and comment period should be no less than 30 days and no longer than 90 days. The review period in this case will be 45 days, beginning September 20, 2013 and ending on November 4, 2013. Public comment on the Draft SEIR will be accepted both in written form and orally at public hearings. Although no public hearings to accept comments on the EIR are required by CEQA, the City expects to hold a public comment meeting during the 45-day review period prior to EIR certification. Notice of the time and location of the hearing will be published prior to the hearing. All comments or questions regarding the Draft SEIR should be addressed to:

Christopher Jordan
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758
cjordan@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 and to oral comments made at public hearings regarding the Project.

1.0 INTRODUCTION

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The Elk Grove Planning Commission will review and consider the Final EIR. If the Planning Commission finds that the Final EIR is "adequate and complete," the Planning Commission will make a recommendation to the City Council whether to certify the EIR, and the City Council will make a final decision as to what action to take. The Planning Commission and City Council will each hold a hearing on the Project as part of consideration of its requested entitlements. A decision to approve the Project would be accompanied by written findings in accordance with CEQA Guidelines Section 15091 and, if applicable, a Statement of Overriding Considerations in accordance with Section 15093. A Mitigation Monitoring and Reporting Program (MMRP), as described below, would also be adopted for mitigation measures that have been incorporated into or imposed upon the Project to reduce or avoid significant effects on the environment. This MMRP will be designed to ensure that these measures are carried out during Project implementation.

MITIGATION MONITORING

CEQA Section 21081.6(a)(1) requires lead agencies to adopt an MMRP to describe measures which have been adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The specific "reporting or monitoring" program required by CEQA is not required to be included in the EIR; however, it will be presented to the City Council for adoption. Throughout the EIR, mitigation measures are clearly identified and presented in language that will facilitate establishment of an MMRP. Any mitigation measures adopted by the City as conditions for approval of the Project will be included in the MMRP to verify compliance.

1.7 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City received comment letters on the Notice of Preparation for the proposed Project (see **Table 1.0-1**). A copy of each letter is provided in **Appendix B** of this Draft SEIR. The City received letters from the following agencies and interested parties.

**TABLE 1.0-1
LIST OF NOP COMMENT LETTERS**

Agency	Date	Comment
Sacramento Metropolitan Air Quality Management District (SMAQMD)	5/2/2013	The comment noted that mitigation measures for the Sheldon/99 GPA and Rezone project would be applicable to the proposed Project. Recommended that the greenhouse gas analysis be consistent with the City's Climate Action Plan (CAP). Provided information regarding obtaining an authority to construct a gas dispensing facility, demolition requirements, and general SMAQMD rules.
Sacramento Area Sewer District	5/9/2013	Stated that sewer infrastructure will be required to be constructed within a public sewer easement or on-site, which would be expected to result in no adverse effects. The comment stated that the treatment plant has the capacity to treat wastewater from the Project site and that they have no specific concerns.
Taylor & Wiley	5/20/2013	Comment requests that the cumulative analysis consider Sheldon Crossing as it is currently proposed, including left-in access from East Stockton Boulevard between Sheldon Road and the roundabout. They also submitted previous comments dated January 21, 2013, and January 15, 2013. These comments are summarized as follows:

Agency	Date	Comment
		<p><u>Introduction and Project Description:</u> Insufficient context is provided and the relationship between the proposed Project and the Sheldon/99 GPA and Rezone EIR is confusing. The comment also states that the EIR should provide additional clarification on the change of the designation on one of the parcels in the Project to Commercial at the "11th hour" of the approval of the Sheldon/99 GPA and Rezone project.</p> <p><u>Aesthetics:</u> Proposed commercial uses were not previously included in the light and glare analysis.</p> <p>Placement of residential units adjacent to residential units is different from placing commercial uses adjacent to residential uses. This is a change of character from the previous EIR.</p> <p><u>Air Quality:</u> Operations of service vehicles not included in the Sheldon/99 GPA and Rezone EIR analysis.</p> <p><u>Hazards and Hazardous Materials:</u> Storage of gasoline on the Project site was not previously addressed in the Sheldon/99 GPA and Rezone EIR analysis.</p> <p><u>Land Use:</u> Impacts of the proposed land uses on the established community and potential conflicts with existing adjacent residential land uses were not previously analyzed.</p> <p><u>Noise:</u> Noise effect of drive-through speakers was not previously addressed; questions the effectiveness of sound walls and feasibility of previous mitigation.</p> <p><u>Traffic:</u> Requests that the impacts to the State Highway System be evaluated based on the Caltrans standards of significance. Egress and ingress effects on roadway operations were not previously evaluated. The commenter provided a memorandum prepared by TRC with additional comments on the TIS prepared by Fehr & Peers in March 2012.</p>
Taylor & Wiley	5/20/2013	Comment requests that the cumulative analysis consider the commercial property at the northeast corner of Sheldon and Power Inn roads, as it is fully entitled and requires only design review in order to proceed with development.
California Department of Transportation (Caltrans)	5/20/2013	Recommends a Traffic Impact Study (TIS) to assess the impact of the Project on the State Highway System and adjacent roadway network. They provided a list of additional locations to be included in the TIS. The comment also provided information regarding Transportation Management Plans (TMP) and Transportation Permits.

The following provides information on how this Subsequent EIR, or previously-adopted document, addresses the comments on the NOP.

Comments regarding greenhouse gas emissions are addressed in Section C.VII of the Initial Study and Section 3.3 of this Draft SEIR. The Project will change the site from vacant and rural residential land to urban land uses. The Sheldon/99 GPA and Rezone EIR determined that the greenhouse gas emissions impact would be significant and unavoidable (Impact 4.7.5 on pages 4.7-29 through 4.7-34). This impact and the Project's relationship to the City's Climate Action Plan are further addressed in Section 3.3 of this Draft SEIR.

Comments regarding sewer are informational only and do not require a response.

Comments regarding the introduction and the project description are addressed in chapters 1.0 and 2.0 of this Draft SEIR. More specifically, comments regarding the introduction and project

1.0 INTRODUCTION

description are addressed in the following subsections of the Subsequent EIR: Section 1.1 within the Introduction, describes the purpose and background of the Project; Section 1.2 describes the type of document being prepared; and Sections 1.4 and 2.1, within the Project Description, provide a description of the relationship to the Sheldon/99 GPA and Rezone EIR. Section 2.0 provides a detailed description of the Project.

Comments regarding light and glare are addressed in Section C.I of the Initial Study (Appendix B). Changing the land use and buildout of the proposed Project would not substantially worsen light and glare impacts beyond what was already considered in the Sheldon/99 GPA and Rezone EIR because the proposed Project will be required to be consistent with Section 23.56.030 of the City's Zoning Code, which provides outdoor lighting standards that include shielding requirements, maximum level of illumination, and height of outdoor light fixtures. In addition, high-density residential would likely be multistory, which could result in a greater amount of spillover light on adjacent parcels than the single-story development currently proposed. There is no new or substantially more severe significant impact, and this issue is not addressed further in this Subsequent EIR.

Comments regarding air quality are addressed in Section C.III of the Initial Study and Section 4.2 of this Subsequent EIR. Development of the Project site will change the site from vacant and rural residential land to urban land uses. The Sheldon/99 GPA and Rezone EIR considered the air quality impacts of changing land uses from their current state to residential and commercial uses (Impacts 4.7.1 through 4.7.3), which were considered less than significant for Impacts 4.7.1 after implementation of adopted mitigation measures. Mitigation Measures MM4.7.1a through MM4.7.1h would reduce the Project's air quality construction impacts for nuisance conditions in accordance with SMAQMD regulations by performing dust control measures and the required utilization of lower emission construction. Mitigation Measure MM4.7.2 (for Impact 4.7.3) would lower emissions for ROG NO_x, and PM₁₀ long term, but this impact was still found to be significant and unavoidable. Impacts associated with increases in criteria pollutants are further addressed in Section 4.2 of this Draft SEIR.

Comments regarding hazards and hazardous materials are addressed in Section C.VIII of the Initial Study. Hazardous materials regulations must be implemented by employers/businesses, as appropriate, and are monitored by the State (e.g., Cal/OSHA in the workplace or Department of Toxic Substances Control [DTSC] for hazardous waste) and/or local jurisdictions (e.g., the Cosumnes Community Services District Fire Department). The Project applicant would be required to comply with the permit application and plan submittal process of the Sacramento County Environmental Management Department, Hazardous Materials Division, and with all sections of the California Code of Regulations, Underground Tank Regulations. Compliance with applicable federal and state laws and regulations would reduce impacts associated with the routine use, storage, and transportation of hazardous materials and the risk of upset associated with the proposed Project to a less than significant level. Compliance with these regulations would ensure there is no new or substantially more severe significant impact, and this issue is not addressed further in this Subsequent EIR.

Comments regarding land use are addressed in Section C.X of the Initial Study. The Project would not alter impacts related to physically dividing an existing community beyond what was already considered in the Sheldon/99 GPA and Rezone EIR. Since the Project site is located in an urban area that is already surrounded by and/or designated by the General Plan for development, the proposed Project would not physically divide an established community. The proposed Project would result in similar uses as considered by the City Council in certifying the Sheldon/99 GPA and Rezone EIR and approving the Project, albeit at different locations. In addition, the Elk Grove General Plan does not restrict high-density residential, low-density

residential, and/or commercial uses from being located adjacent to one another, and locating these uses adjacent to one another is not considered incompatible. The proposed Project is required to comply with Elk Grove Design Guidelines and Elk Grove Municipal Code Title 23 (Zoning Code) requirements for commercial (nonresidential) development, which would ensure that potential conflicts would be reduced through building setback, massing, height, parking, landscape, lighting design, and screening/buffering requirements. There is no new or substantially more severe significant impact, and this issue is not addressed further in this Subsequent EIR.

Comments regarding noise are addressed in Section C.VII of the Initial Study (Appendix B) and Section 3.4 of this SEIR. The proposed Project includes commercial land uses, such as a car wash and restaurants with drive-through service, which could generate noise levels that exceed applicable City of Elk Grove exterior noise level standards. Although the City Council, in approving the Sheldon/99 GPA Rezone Project, determined noise impacts from these proposed uses would be less than significant, this impact is further addressed in Section 3.4 of this SEIR.

Comments regarding traffic are addressed in Section C.XIV of the Initial Study and Section 3.5 of this Subsequent EIR. The Project includes commercial uses, including a gas station, convenience store, car wash, and restaurants with drive-through facilities, which would generate traffic that exceeds current conditions. Although the City Council, in approving the Sheldon/99 GPA Rezone Project, considered these land uses and their associated traffic impacts, this issue is further addressed in Section 3.5 of this SEIR to ensure that the proposed Project's trip generation and distribution do not exceed applicable thresholds.

A comment on the NOP requested the SEIR include the commercial property located at the northeast corner of Sheldon and Power Inn roads in the cumulative context. Because this site is consistent with the General Plan, development of that site is already included in the cumulative context, which considers buildout of the General Plan. This SEIR does not, however, provide a project-specific analysis of development of that site or consider specific components included in the project application for that site, as it has not yet been approved.

A Traffic Impact Study was prepared for the proposed Project, and its findings have been incorporated into Section 4.5 of this Subsequent EIR. The Traffic Impact Study has been included in Appendix E.

1.8 IMPACT TERMINOLOGY

This Draft SEIR uses the following terminology to describe environmental effects of the proposed Project:

- **Standards of Significance:** The criteria used by the lead agency to determine at what level or "threshold" an impact would be considered significant. Significance criteria used in this Draft SEIR include the CEQA Guidelines, factual or scientific information, regulatory performance standards of local, state, and federal agencies, and City goals, objectives, and policies.
- **Less Than Significant Impact:** A less than significant impact would cause no substantial change in the environment. No mitigation is required.
- **Significant Impact:** A significant impact would cause, or would potentially cause, a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of Project effects using specified standards of

1.0 INTRODUCTION

significance. Mitigation measures are identified to reduce Project effects on the environment.

- **Significant and Unavoidable Impact:** A significant and unavoidable impact would result in a substantial change in the environment that cannot be avoided or mitigated to a less than significant level if the Project is implemented.
- **Significant Cumulative Impact:** A significant cumulative impact would result in a new substantial change in the environment from effects of the Project when evaluated in the context of reasonably foreseeable development in the surrounding area.

REFERENCES

California, State of. 2013a. Public Resources Code 21000–21177 (CEQA). As amended through January 1, 2013.

———. 2013b. California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387 (CEQA Guidelines). As amended through January 1, 2013.

Elk Grove, City of. 2009a. *City of Elk Grove General Plan*. Adopted November 2003; amended through July 22, 2009. Elk Grove, CA.

———. 2009b. *Sheldon/99 GPA and Rezone Environmental Impact Report* (SCH No. 2007122045). Elk Grove, CA.

———. 2013. *Sheldon Moore Center Project Initial Study* (SCH No. 2012122013). Elk Grove, CA.

2.0 PROJECT DESCRIPTION

2.0 PROJECT DESCRIPTION

This section describes the proposed Moore Sheldon Retail Center Project (Project), depicts the location of the Project both regionally and locally, and describes the existing conditions of the Project site and vicinity. The objectives sought by the Project applicant, and a general description of the Project's technical and environmental characteristics, are provided. A detailed list of the approvals required to implement the Project is also included. As the City of Elk Grove would make a number of decisions on this Project, all decisions subject to the California Environmental Quality Act (CEQA) are listed and the implementation process is described in the order that it would occur, including both actions the City would take now and actions that may be taken in the future.

For a description of the background, purpose, intended use, and type of EIR, please refer to Section 1.0 Introduction of this document. This Project description has been prepared in compliance with CEQA Guidelines Section 15124.

2.1 PROJECT LOCATION AND SETTING

The proposed Project is located on the north side of Sheldon Road, east of East Stockton Boulevard, in Elk Grove, California. The regional and local vicinity of the 4.46-acre Project site are shown in **Figures 2.0-1 and 2.0-2**, respectively.

The Project site is located in the northern portion of the City near State Route 99 (SR 99) near the Sheldon Road exit. The site is approximately 36 to 41 feet above mean sea level. The latitude and longitude location for the site are 38°26'19.89"N and 121°23'47.31"W, respectively. Currently, the Project site is mostly vacant except for two vacant houses and a portion of a former outbuilding located on the southern end of the parcels. The majority of the Project site has been disturbed as a result of activities related to the two rural residential properties on the site and is characterized by weedy vegetation.

SURROUNDING LAND USES

The Project is surrounded by residences to the east and south and vacant land to the north and west. These surrounding land uses are designated for Low Density Residential, Medium Density Residential, and Commercial uses in the City of Elk Grove General Plan.

2.2 PREVIOUS PLANNING AND ENVIRONMENTAL DOCUMENTS

The 2.58-acre western section of the Project site (parcel 115-0150-064) is designated High Density Residential (HDR) in the Elk Grove General Plan and zoned RD-20 (High Density Residential 20 du/ac) (see **Figure 2.0-3**). The HDR General Plan designation allows for apartments, condominiums, or clustered single-family houses with a density range of 15 to 30 dwelling units per gross acre. The RD-20 district is intended for high-density attached single-family homes, such as townhomes or row houses, or medium-density multifamily development that includes apartments and condominiums up to a maximum density of 20 dwelling units per acre. Assuming approximately 20 units per acre, this parcel could accommodate 51 dwelling units. Detached single-family homes in the HDR designation 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.

2.0 PROJECT DESCRIPTION

The 1.88-acre eastern section of the Project site (parcel 115-0150-067) is designated Commercial in the Elk Grove General Plan. It is zoned as Limited Commercial (LC). The Commercial General Plan designation allows for office, professional, and retail uses in any mix. The limited commercial district is designed to foster low-intensity, neighborhood-oriented commercial development adjacent to, integrated in, 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. Assuming a 0.35 floor area ratio for commercial uses, as assumed in the Sheldon/99 GPA and Rezone EIR, this parcel has a current development potential of 28,662 square feet of commercial use.

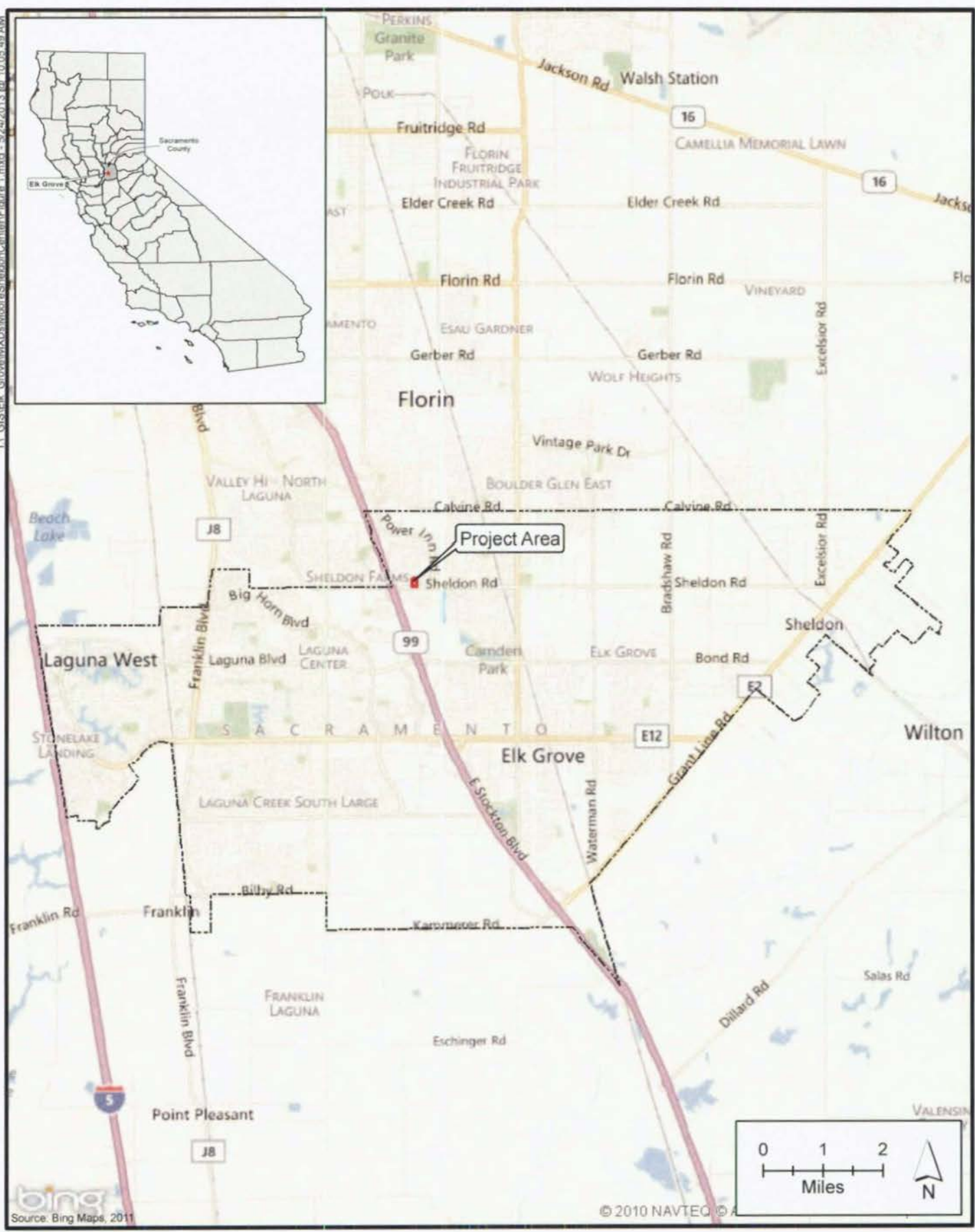
SHELDON/99 GPA AND REZONE PROJECT

The Project area is included as part of the Sheldon/99 GPA and Rezone EIR Project area and was examined under the EIR prepared for the Project and finalized in February 2009 (SCH No. 2007122045). The Sheldon/99 GPA and Rezone Project was initiated by the Elk Grove City Council in August 2006, after a Citywide office and retail analysis indicated that the Sheldon Road/SR 99 Interchange Reconstruction Project, which was approved in 2005, would cause several parcels east of the Sheldon Road/SR 99 Interchange to have increased commercial potential as a result of the interchange improvements and realignment of East Stockton Boulevard. The proposed Moore Sheldon Center Project is subject to the adopted mitigation measures described in the Mitigation Monitoring and Reporting Program (MMRP) for the Sheldon/99 GPA and Rezone EIR.

The Sheldon/99 GPA and Rezone EIR analyzed development of the two parcels for high-density residential use. After preparation of the EIR, but prior to EIR certification and approval of the Project, the designation of parcel 115-0150-067 was changed to a Commercial designation, consistent with a conditional use permit approved in 2007 for a commercial use on that parcel. The City Council considered that change of land use and determined that there would be no additional impact related to a change from residential to commercial at that site. With a residential use or a commercial use on parcel 115-0150-067, there would be adjacency and an interaction of residential use with commercial use; the only difference is the location of the boundary. Upon approving the Project, the City also adopted Findings of Fact and a Statement of Overriding Considerations for the Sheldon/99 GPA and Rezone EIR, which considered parcel 115-0150-064 with an HDR designation and parcel 115-0150-067 with a Commercial designation. The certified EIR was not challenged on that point.

All documents associated with the Sheldon/99 GPA and Rezone EIR Project are available for review at the City of Elk Grove, Development Services – Planning, 8401 Laguna Palms Way, Elk Grove, CA 95758. The adopted MMRP for this document is included in Appendix A of this Draft EIR.

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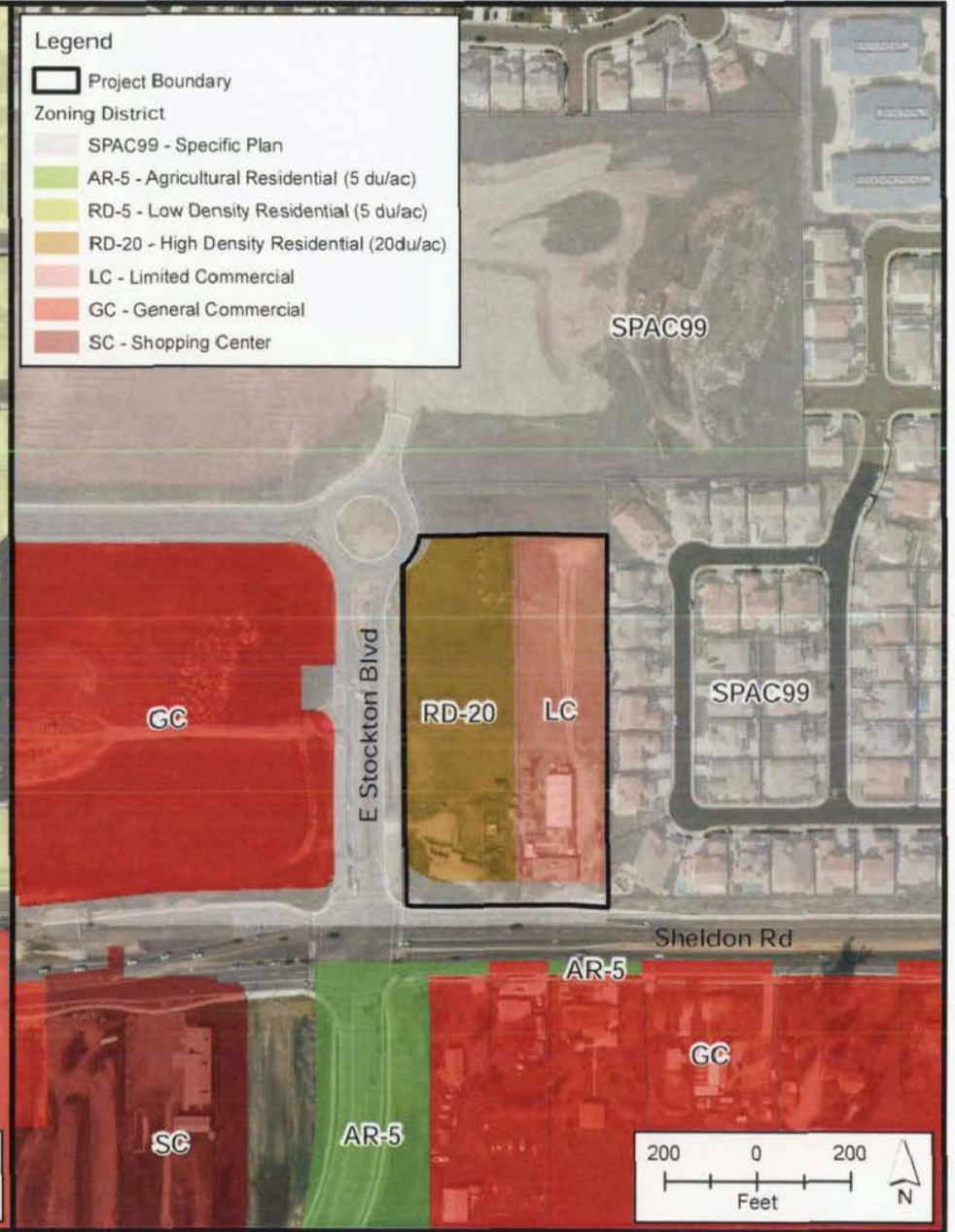


City of Elk Grove
Development Services

Figure 2.0-1
Project Vicinity



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City of Elk Grove
Development Services

Figure 2.0-3
Existing General Plan and Zoning Districts

2.3 PROJECT OBJECTIVES

The following objectives have been identified for the proposed Project:

- Provide a retail Project within one quarter to one half mile of a major freeway interchange.
- Maximize development potential for the Project.
- Provide a mix of retail/office uses that are the highest and best use for the Project location.
- Develop at a density that allows adequate parking and on-site circulation to serve proposed uses.

2.4 PROJECT CHARACTERISTICS

The proposed Project would change the General Plan designation on the western parcel of the site from High Density Residential to Commercial, consistent with the eastern parcel of the site. The Project would also rezone the western parcel of the Project site from RD-20 (High Density Residential 20 du/ac) to General Commercial (GC) and the eastern parcel from Limited Commercial (LC) to GC. Proposed land use designations and zoning districts are shown in **Figure 2.0-4**. Development of the proposed Project uses would include the construction of approximately 27,430 square feet of commercial buildings on 4.46 acres, consisting of the following:

- An 1,800-square-foot office building located along Sheldon Road
- Gas station consisting of eight fuel dispensers under a canopy and associated underground fuel storage tanks adjacent to Sheldon Road
- A 13,409-square-foot building composed of the following:
 - a fast food restaurant (4,100 square feet) with a drive-through located to the east
 - a convenience store associated with the gas station (6,554 square feet)
 - a deli shop (1,160 square feet)
 - a wine/liquor shop (720 square feet)
 - a yogurt shop (875 square feet)
- A 3,061-square-foot car wash
- A 4,580-square-foot restaurant
- A 4,580-square-foot building with a drive-through lane located on the northern border of the Project site
- A new masonry sound wall on the north end of the Project site beyond the drive-through lane

2.0 PROJECT DESCRIPTION

- Three patios
- 109 parking spaces and bicycle parking
- On-site signage

The Project site plan is shown in **Figure 2.0-5**. Proposed buildings for the Project would be single story, up to approximately 20 feet in height, with one building component (tower) up to approximately 30 feet.

Construction

Construction of the Project site is anticipated to begin spring 2014. After demolition of the existing structures, the site would be graded and trenched for installation of utilities. As designed, the Project will not need to import or export soil.

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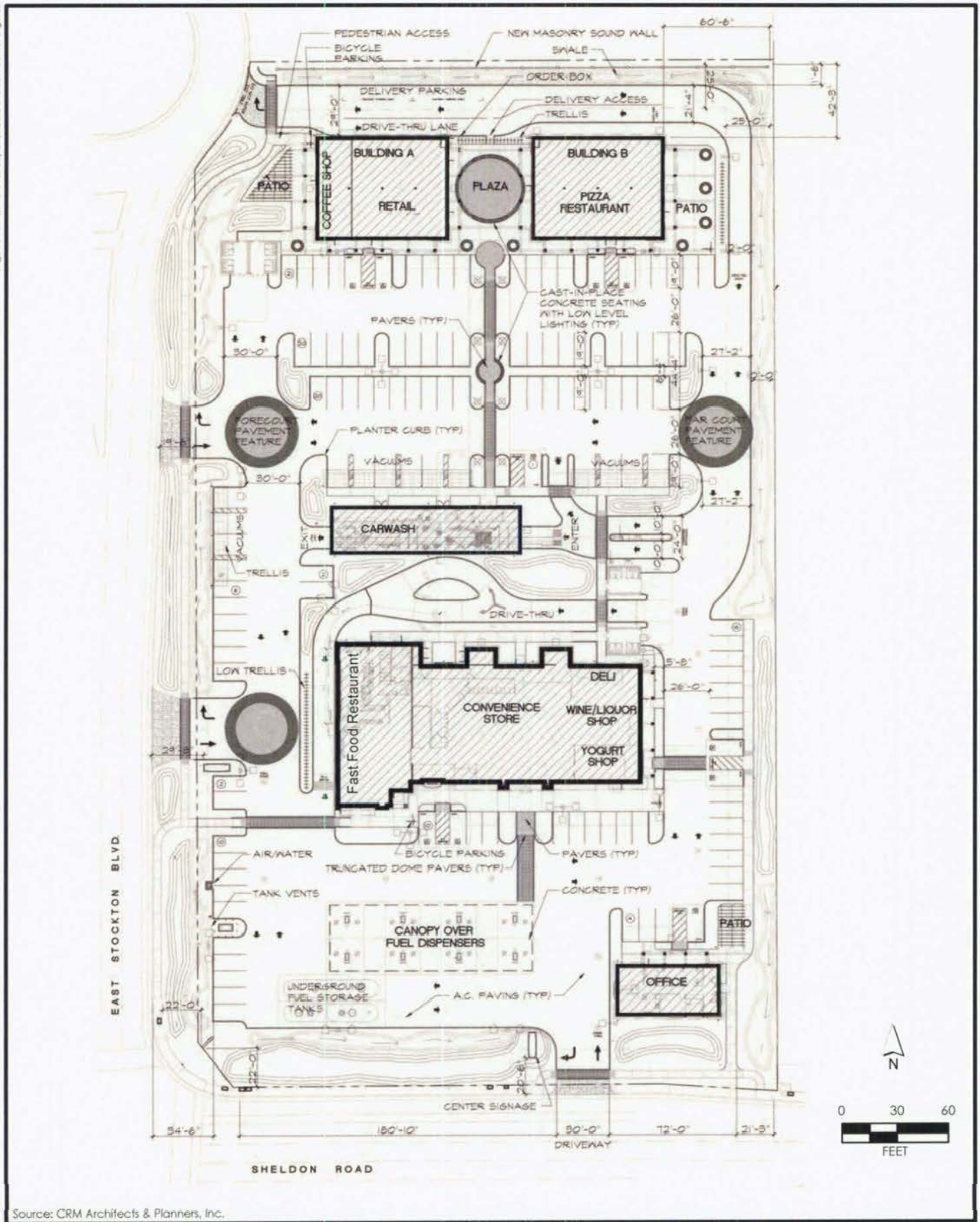


Service Layer Credits



City of Elk Grove
Development Services

Figure 2.0-4
Proposed General Plan and Zoning Districts



Source: CRM Architects & Planners, Inc.



City of Elk Grove
Development Services

FIGURE 2.0-5
Site Plan

2.5 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS**CITY OF ELK GROVE**

The Project site is under the jurisdiction of the City of Elk Grove. Actions that would be required from the City Council, Planning Commission, and/or City staff include, but are not limited to, the following:

- Approval of an amendment to the General Plan to change the land use designation of parcel 115-0150-064 from High Density Residential (HDR) to Commercial.
- A rezone to change parcel 115-0150-064 from a zoning of RD-20 (High Density Residential 20 du/ac) to a zoning of General Commercial (GC) and to change parcel 115-0150-067 (approximately 1.88 acres) from a zoning of Limited Commercial (LC) to General Commercial (GC).
- Approval of a tentative parcel map to subdivide the two properties into five parcels.
- Approval of a conditional use permit to allow the operation of a drive-through restaurant and service station.
- A design review for the construction of commercial uses on the Project site.

RESPONSIBLE AGENCIES

A responsible agency is a public agency with discretionary approval over one or more actions involved with the development of a proposed Project. Responsible agencies could include the following:

- Sacramento Metropolitan Air Quality Management District
- State of California, Department of Transportation

OTHER AGENCIES

Other discretionary approvals by other governmental agencies include, but are not limited to, the following:

- Water quality permitting (National Pollutant Discharge Elimination System and water quality certifications) under the Clean Water Act by the Central Valley Regional Water Quality Control Board
- Approval of infrastructure details for water supply facilities by the Sacramento County Water Agency
- Approval of infrastructure details for wastewater conveyance facilities by Sacramento Area Sewer District

2.0 PROJECT DESCRIPTION

REFERENCES

Elk Grove, City of. 2003. *City of Elk Grove Zoning Code*. Elk Grove, CA.

———. 2005. *City of Elk Grove General Plan*. Elk Grove, CA. Adopted November 2003; amended January 2005.

———. 2009. *Sheldon/99 GPA and Rezone Project Environmental Impact Report* (SCH No. 2007122045). Elk Grove, CA.

3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

The following is an introduction to the Project-specific and cumulative environmental analysis and general assumptions used in the analysis. The reader is referred to the individual technical sections of the Draft Subsequent Environmental Impact Report (Draft SEIR) regarding specific assumptions and methodology and significance criteria used in the analysis.

ANALYSIS ASSUMPTIONS GENERALLY USED TO EVALUATE THE IMPACTS OF THE PROJECT

BASELINE ENVIRONMENTAL CONDITIONS ASSUMED IN THE DRAFT SEIR

Section 15125(a) of the California Environmental Quality Act (CEQA) Guidelines requires that an EIR include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation (NOP) is published. The CEQA Guidelines also specify that this description of the physical environmental conditions is to serve as the baseline physical conditions by which a lead agency determines whether impacts of a project are considered significant.

The environmental setting conditions of the Project site and the surrounding area are described in the technical sections of the Draft SEIR (see Sections 3.1 through 3.5). In general, these setting discussions describe the setting conditions of the Project site and the surrounding area as they existed when the NOP for the Project was released in April 2013.

APPROACH TO THE PROJECT-SPECIFIC ANALYSIS

Project Buildout Assumptions

The Draft SEIR impact analysis is based on buildout of the proposed Moore Sheldon Center Project. Section 2.0, Project Description, identifies buildout conditions of the Project site under the proposed Project. Operational impacts of the Project are based on Project buildout.

Sections 3.1 through 3.5 of this Draft SEIR contain a description of current setting conditions (including applicable regulatory setting), an evaluation of the direct and indirect environmental effects resulting from the implementation of the proposed Project, identification of measures that mitigate the identified significant environmental effects, additional feasible mitigation measures, and, if applicable, identification of whether significant environmental effects of the proposed Project would remain after application of proposed mitigation measures. The individual technical sections of the Draft SEIR follow the format outlined below.

Existing Setting

This subsection includes a description of the physical setting conditions associated with the technical area of discussion, consistent with CEQA Guidelines Section 15125. As identified above, the existing setting is based on conditions as they existed when the NOP for the Project was released.

Regulatory Framework

This subsection consists of the identification of applicable federal, state, regional, and local plans, policies, laws, and regulations that apply to the technical area of discussion.

3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

Impacts and Mitigation Measures

The Impacts and Mitigation Measures subsection identifies direct and indirect environmental effects associated with implementation of the proposed Project and identifies proposed measures that mitigate the environmental effect (unless that impact results in an unavoidable impact). Statements are included in the impact discussion to identify the level of significance the impact will have after mitigation. Standards of significance are identified and utilized to determine whether identified environmental effects are considered "significant" and require the application of mitigation measures. Each environmental impact analysis is identified numerically and is supported by substantial evidence included in the discussion. Impacts of the proposed Project are described in light of the environmental analysis provided in the Sheldon/99 GPA and Rezone EIR. Consistent with CEQA Guidelines Section 15162, this Draft SEIR addresses environmental effects that are particular to the Project and assumes mitigation measures from the adopted Sheldon/99 GPA and Rezone Project EIR would be implemented to mitigate anticipated impacts. If additional measures are required to reduce an effect specific to the Project, those measures are included in the analysis.

CEQA requires that mitigation to lessen the environmental impact must be feasible. CEQA Guidelines Section 15126.4(a)(1) states, "[a]n EIR shall describe feasible measures which could minimize significant adverse impacts..." Feasible is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (CEQA Section 21061.1).

As discussed in Section 1.0, Introduction, the proposed Project is subject to the adopted mitigation measures described in the Mitigation Monitoring and Reporting Program (MMRP) for the Sheldon/99 GPA and Rezone EIR. Applicable mitigation measures are identified in the impact discussions in this Draft SEIR, and these measures are assumed to be implemented by the Project. Any additional mitigation required to reduce Project impacts are identified after the impact discussion under the heading "Mitigation Measures," and where additional mitigation is not required, "None required" is noted.

APPROACH TO THE CUMULATIVE IMPACT ANALYSIS

Definition of Cumulative Setting

CEQA Guidelines Section 15130(a) requires that an EIR "discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." CEQA Guidelines Section 15130(b) states, "[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 standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact."

For this Project, the cumulative setting conditions considered in this Draft SEIR generally encompass the City of Elk Grove and, specifically, the Sheldon/99 GPA and Rezone project area. Therefore, the cumulative setting conditions consider the City of Elk Grove General Plan (adopted November 2003; amended July 2009). However, the cumulative setting varies for each environmental issue area, depending on the resources affected and any relevant boundaries, such as the Sacramento Valley Air Basin for air quality resources. Each technical section of the Draft SEIR includes a description of the geographic extent of the cumulative setting for that resource based on the characteristics of the environmental issues under consideration as set forth in Section 15130(b) of the CEQA Guidelines.

Consideration of Cumulative Impacts

Each technical section in the Draft SEIR considers whether the Project's effect on anticipated cumulative setting conditions is cumulatively considerable (i.e., a significant effect). The determination of whether the Project's impact on cumulative conditions is considerable is based on applicable public agency standards, consultation with public agencies, and/or expert opinion.

EFFECTS FOUND NOT TO BE SIGNIFICANT

As discussed in the Initial Study for the Project (see **Appendix B**), the following topics were adequately addressed in the previous EIR: agriculture and forest resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology, land use, mineral resources, population and housing, public services and utilities, and recreation. As discussed in Chapter 1.0, Introduction, the proposed Project would be required to comply with mitigation measures adopted for the Sheldon/99 GPA and Rezone project. The Mitigation Monitoring and Reporting Program for the Sheldon/99 GPA and Rezone EIR is included in **Appendix A** of this Draft SEIR.

3.1 VISUAL RESOURCES/AESTHETICS

This section discusses the existing visual resources at the Project site and in the general vicinity and provides an analysis of the anticipated changes to the visual characteristics and resources of the area as a result of implementation of the proposed Project.

This section addresses the Project's effect on the visual character of the Project site and compares that to the conclusions of the Sheldon/99 GPA and Rezone Project EIR. This section addresses the comments regarding changes in visual character associated with changing the proposed use from high density residential to commercial at the Project site.

3.1.1 ENVIRONMENTAL SETTING

REGIONAL SETTING

Elk Grove is characterized by the flat terrain typical of the Central Valley. Distant views of the Sierra Nevada and Coastal ranges are visible from the City under clear conditions, but there are no designated scenic vistas within the City (Elk Grove 2005). The City has a historic downtown area located east of State Route (SR) 99 that has a distinct visual aesthetic characterized by historic buildings and landmarks. The northeastern portion of the City is a rural area characterized visually by large lots and mature trees, as well as by agricultural uses. Newer development and urban growth is primarily concentrated in the central portion of the City between Interstate 5 and SR 99. There are no officially designated state scenic highways in the City of Elk Grove.

PROJECT SITE AND SURROUNDING LAND USES

The Project site is located at the northeast corner of Sheldon Road and East Stockton Boulevard.

The visual character of the Project site is currently rural residential land with two vacant houses. Land uses surrounding the project site include residences to the east, vacant land to the north, East Stockton Boulevard and vacant land to the west, and Sheldon Road and residences to the south. Lands to the north, east, and west are within the Calvine/99 Special Planning Area, and areas to the south and west are within the Sheldon/99 GPA and Rezone area.

South and northwest of Sheldon Road are agricultural lots and rural residences characterized by open grassy areas and a variety of mature trees with chain-link fences separating the individual properties. There are one- and two-story single-family residences east of the project site. There is an approximately 6-foot soundwall and landscaping along Sheldon Road and a soundwall along the eastern boundary of the Project site.

The current nighttime lighting conditions on the Project site can be characterized as primarily unlit and natural, as the existing rural residences on the site are currently vacant. While the Project site does not currently include any streetlights, there are streetlights along Sheldon Road. Some lighting resulting from the illumination of SR 99 and existing commercial uses to the west can be seen from the Project site at night. Additionally, some lighting from the residential neighborhoods east of the Project site can be seen at night from the site. The existing structures on the site are residential and agricultural in nature and do not currently produce significant glare.

3.1 VISUAL RESOURCES/AESTHETICS

3.1.2 REGULATORY SETTING

LOCAL

City of Elk Grove General Plan

The following Elk Grove General Plan (General Plan) policies regarding visual resources and aesthetics are applicable to the proposed Project:

"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 that were removed.

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

"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.

"Policy LU-38: Reduce the unsightly appearance of overhead and above ground utilities. (Further implemented through LU-38 Action 1-2)."

City of Elk Grove Zoning Code

The City of Elk Grove Elk Grove Municipal Code Title 23 (Zoning Code) provides development standards that address building mass, setbacks, landscaping, lighting, and signage to achieve an aesthetically pleasing appearance. All development resulting from the proposed Project would be required to comply with the Zoning Code.

Elk Grove Design Review Process

Section 23.16.080 of the Elk Grove Municipal Code (Design Review) establishes an expanded design review process for all development requiring additional site and design consideration beyond conformance with minimum standards of the Zoning Code. Section 23.16.080(E)(1) requires applicable development to comply with the Citywide Design Guidelines which include design provisions for site planning, architecture, lighting, and landscaping. The guidelines also include provisions regarding the preservation of significant natural features and compatibility with surrounding property. The City strongly encourages project design that incorporates existing significant natural features of project sites, including but not limited to trees/tree clusters, topography, and creeks. The guidelines encourage the use of landscaping to reduce potential impacts of lighting from parking areas on both the Project site and on adjacent vacant land. In addition, the guidelines specify that perimeter landscaping be designed to maximize screening

and buffering between adjacent uses. The following guidelines for nonresidential development would apply to the Project:

"37) 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."

"39) 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 structures directly abutting a nonresidential site, illumination measured at the nearest residential structure or rear yard/side yard setback line shall not exceed the moon's potential ambient illumination of one-tenth (0.1) foot-candle. This measurement is not taken at the property line, but at the nearest location of a residential structure (required rear yard or side yard setback line)."

"40) Except as otherwise exempt, all outdoor lighting for nonresidential development shall be constructed with full shielding. Where the light source from an outdoor light fixture is visible beyond the property line, shielding shall be required to reduce glare so that the light source is not visible from within any existing or future residential dwelling unit."

"41) Outdoor light fixtures used to illuminate architectural or landscape features should use a narrow cone of light for the purpose of confining the light to the object of interest and minimize light trespass and glare. Appropriate level of illumination will be determined during the required design review."

3.1.3 STANDARDS OF SIGNIFICANCE, IMPACTS, AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

A project is considered to have a significant effect on the environment if it will:

- 1) Have a substantial adverse effect on a scenic vista.
- 2) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- 3) Substantially degrade the existing visual character or quality of the site and its surroundings.
- 4) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

As discussed in the Initial Study/Notice of Preparation (IS/NOP; **Appendix B**), the proposed Project would not result in any new or substantially more severe impacts related to scenic vistas, scenic resources, or state scenic highways, or impacts related to light and glare (Standards of Significance 1, 2, and 4).

Comments on the NOP related to light and glare stated that the light impacts of residential uses would be different from those of nonresidential uses, so the proposed Project would result in different impacts than assumed for current land use designations. However, while the lighting needs of residential and nonresidential uses would be different, the current land use designations for the site would allow development of residential and commercial uses on the

3.1 VISUAL RESOURCES/AESTHETICS

Project site. Therefore, under current designations (see **Figure 2.0-3**), there is potential for residential and nonresidential development, with differing lighting needs, adjacent to one another. Therefore, the change associated with the proposed Project would be the location where the interface of residential and nonresidential uses occurs. Because only the location of the boundary between residential and nonresidential would change with the Project, and not the interaction between residential and nonresidential uses, there would not be a substantial change from that with the existing designations. In addition, the City determined that implementation of the City's design guidelines, as cited on page 3.1-2 of this SEIR under "Elk Grove Design Guidelines," related to lighting would reduce impacts on adjacent uses and this would not be considered significant. Therefore, light and glare is not addressed further in this Draft SEIR.

The following analysis focuses on potential changes to the visual character of the area and considers NOP comments related to changes in visual character.

METHODOLOGY

For the purposes of this analysis, the site and its vicinity have been visited in order to consider the existing community character and to determine the Project's consistency with the surrounding setting.

The following analysis considers the potential for the proposed Project to result in new or more severe significant environmental impacts in the context of the significant impacts related to visual resources and aesthetics that were previously disclosed in the Sheldon/99 GPA and Rezone Environmental Impact Report (EIR) (Elk Grove 2009). In addition, any items brought up during the public review process of the Moore Sheldon Center NOP are also addressed in this Draft SEIR.

PROJECT IMPACTS AND MITIGATION MEASURES

Degrade Existing Visual Character (Standard of Significance 3)

Impact 3.1.1 The proposed Project would convert the existing rural residential visual character to developed urban uses, which would substantially alter the current views of the site to travelers on the surrounding arterial roadways. However, this change was considered in the previous document. **The proposed Project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts.**

The proposed Project would amend the land use designation on the western parcel to allow commercial land uses in lieu of high-density residential land uses. The comment on the NOP from Taylor & Wiley dated May 20, 2013 states that placing residential units adjacent to one another is distinctly different from placing residential adjacent to commercial. However, as discussed above, under existing zoning (Elk Grove Municipal Code sections 23.30.020 and 23.32.020) for the parcels that make up the Project site, residential and commercial uses are allowed adjacent to one another. The previous EIR did not consider placing residential and commercial uses adjacent to one another a significant impact, but did consider the change from vacant to developed land significant. The City acknowledges there are visual differences between residential and commercial construction. However, because the visual analysis focuses on the change of use from relatively undeveloped to developed, rather than on the perceived quality of development, the effect related to changes from vacant to developed land is the same, irrespective of the particular use developed. Furthermore, the existing General Plan designation

of the eastern parcel would allow for the development of commercial uses adjacent to the existing residences to the east of the Project site and adjacent to high-density residential allowed under the current General Plan designation of the western parcel within the Project site.

The comment on the NOP from Taylor & Wiley dated May 20, 2013 states that the high-density residential development would buffer existing single-family residences from commercial development, but it does not point to a particular impact that would be more severe for single-family residential as opposed to multi-family residential. In either case, residential would be located near commercial regardless of density. As noted above, the proposed Project would be required to comply with City lighting standards which, as described in the City Design Guidelines, require exterior lighting to be pedestrian in scale and shielded downward to avoid off-site illumination. There is not a higher standard for lighting impacts on single-family versus multi-family residential. The Project would not result in a substantial change in the visual character from what had already been disclosed as a significant and unavoidable impact with no available mitigation in the previous EIR.

Commercial development proposed on the Project site would be subject to design review and the City's guidelines for nonresidential development, which provide parameters for site planning and architecture and ensure that the visual character of development is consistent with surrounding land uses. The City encourages incorporation of the "village" or "campus" design concept. This type of creative design solution integrates clusters of buildings with a combination of walking, landscape, and public space to achieve a desirable pedestrian experience. The design guidelines address site planning, access and circulation, parking lots, streetscape and landscaping; storage, loading, and services areas; trash and recycling; utility placement; and lighting of parking areas, drives, and pedestrian walkways. Additional design guidelines are provided for retail commercial centers. These design guidelines specifically address where nonresidential development abuts residential uses/land to ensure that potentially undesirable impacts associated with nonresidential development (traffic, noise, light and glare) are minimized by utilizing appropriate buffering and siting techniques such as sound walls and landscaping. Section 23.52.070(D) of the City of Elk Grove Zoning Code requires that a minimum 6-foot-tall solid masonry wall be installed between nonresidential and residential uses. The design of all proposed walls and fencing along property lines, delineating uses, storage, or outdoor seating, will be reviewed as part of the nonresidential Design Review application. Landscaping that utilizes berms and fast-growing evergreen trees, shrubs, and plants along the adjoining property lines can be an effective buffering tool.

Architectural parameters include design concepts, design guidelines, and architecture required for specific types of nonresidential development. Architectural design concepts for nonresidential architecture include the following characteristics:

- Promote high-quality building designs that consist of durable and maintainable materials and that provide visual interest and diversity to the community.
- Ensure building design achieves human scale and interest.
- Incorporate an architectural style and/or theme for new nonresidential development that is consistent for building elevations of a single structure or consistent among all buildings within an integrated development.
- Ensure the design of proposed buildings or structures is sensitive to the neighborhood character with regard to scale, architectural style, use of materials, and bulk.

3.1 VISUAL RESOURCES/AESTHETICS

Architectural design guidelines address architectural style and design; mass, scale, and form; materials and finishes; screening; signage; and building lighting. The intent of the architectural guidelines is to ensure a base level of quality architecture that is responsive to its context and builds on the aesthetic identity of the community rather than a design solution that is based on a standardized formula or market prototype superimposed on the selected site. The design of proposed buildings or structures on the Project site is required to be sensitive to the neighborhood character with regard to scale, architectural style, use of materials, and bulk. The City prohibits the use of the following types of signs: pole signs; digital and manual reader-board signs (except as otherwise authorized and mandated by the State); internal illumination of freestanding signs, except where the backing is designed to be opaque; and permanent signs with exposed neon tubing or neon tubing enclosed in a sign cabinet with a clear plexiglass sign face. Exterior building and site lighting shall be designed so that light is not directed off-site and the light source is shielded downward from direct off-site viewing.

Specific architectural design guidelines for retail commercial centers require that service stations, car washes, and fast-food drive-throughs are oriented so the service bays and drive-through aisles do not directly face the primary street frontage. If these facilities face an adjoining street, an immediate 3-foot-tall screening is required at the perimeter landscape planter. Screening may include *berming* or mounding of the earth, planting of shrubs or tall ground cover, low walls, or other decorative feature that achieves the visual screen. In addition, fast-food drive-through windows and menu boards must be located a minimum of 300 feet from a residential zone (RD-1 through RD-30), unless a conditional use permit is obtained.

Therefore, as described above, the proposed Project would permanently alter the visual character of the site by introducing new development. The Sheldon/99 GPA and Rezone EIR previously disclosed the change in character as a significant and unavoidable impact to the visual character of the site. Changing the western parcel of the Project site from high-density residential to commercial use does not change that conclusion and the impact under the proposed Project would also remain significant and unavoidable because with or without the Project the site could be developed. As such, the proposed Project's effect on the visual character of the site and surroundings **would not substantially increase the impact from what was previously disclosed** in the Sheldon/99 GPA and Rezone EIR and the impact would remain significant and unavoidable.

Mitigation Measures

None available.

3.1.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for aesthetics is defined as the northern portion of the City of Elk Grove, the City of Sacramento, and unincorporated areas of Sacramento County adjacent to the City limits as previously defined in the Sheldon/99 GPA and Rezone EIR. This includes approved, proposed, and reasonably foreseeable developments in the northern portion of the City limits and surrounding area. The surrounding area is currently occupied by single family residential directly to the east, vacant property directly to the north and west, and a business and rural residences to the south. A church is located to the southwest. SR-99 is located one-quarter mile to the west, and more single family housing is located beyond the existing vacant property the north and the uses to the south. The entire area along Sheldon Road west to SR-99, as well as along the south side of Sheldon Road to the east to an existing residential development located

at the southwest corner of Sheldon Road and Power Inn Road, has been planned for commercial development, with the exception of the Project site. The area north of Sheldon Road east of the existing single family residential development directly adjacent to the Project site is also planned for commercial uses. Medium density residential has been planned directly to the north of the Project site. High density residential is planned along SR-99 northwest of the Project site. Single family, low density residential is planned beyond that to the northwest, and an area planned for mixed commercial/office/multi-family residential is planned to the southwest beyond the planned commercial development and the existing church.

The Sheldon/99 GPA and Rezone EIR disclosed that the realignment of East Stockton Boulevard and the interchange improvements, along with other approved and proposed development in the area including the Sheldon/99 GPA and Rezone site, would create a cohesive commercial center, buffered from existing single-family residences by high-density residential development. The area will, over time, evolve into a more urban environment with views of residential homes and commercial developments.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulatively Degrade Visual Character/Create Cumulative Light and Glare

Impact 3.1.2 The proposed Project, in combination with other approved and proposed projects, would contribute to the alteration of visual character and the incremental creation of cumulative light and glare in the northern portion of Elk Grove and the surrounding area, but the contribution would not be considerable. **The proposed Project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts.**

The Sheldon/99 GPA and Rezone EIR determined that the Sheldon/99 GPA and Rezone project would contribute to a cumulative visual impact relative to the loss of rural residential land as viewed from the public roadways and that cumulative nighttime illumination and glare sources would be increased as a result of the increased intensity of development allowed by the Sheldon/99 GPA and Rezone project. As discussed above, implementation of the proposed Project would alter the visual character of the Project site, which would contribute to a cumulative visual impact that exists relative to the loss of rural residential land as viewed from public roadways. Cumulative nighttime illumination and glare sources would be increased as a result of the increased intensity of development allowed by the proposed Project. While the proposed Project would alter the visual character of the Project site, the alteration would be consistent with the evolving cumulative character of the area due to the Sheldon/99 GPA and Rezone project. Similarly, the addition of light and glare on the Project site was considered in the Sheldon/99 GPA and Rezone EIR, which found compliance with the lighting standards contained in Section 23.56 of the Zoning Code and the Elk Grove Design Guidelines (pursuant to Municipal Code Section 23.16.080[E][1]) would reduce light effects and ensure development would be compatible with the visual character of surrounding uses. The proposed Project would also be required to comply with the City's the lighting standards and Design Guidelines. Therefore, the proposed Project's contribution to cumulative alteration of visual character and the incremental increases of light and glare would not be significant and **would not substantially increase the impact from what was previously disclosed** in the Sheldon/99 GPA and Rezone EIR.

Mitigation Measures

None required.

3.1 VISUAL RESOURCES/AESTHETICS

REFERENCES

Elk Grove, City of. 2003. *Elk Grove Design Guidelines*.

———. 2005. *City of Elk Grove General Plan*. Adopted November 2003; amended January 2005. Elk Grove, CA.

———. 2009. *Sheldon/99 GPA and Rezone Environmental Impact Report* (SCH No. 2007122045). Elk Grove, CA.

———. 2013a. *Sheldon Moore Center Project Notice of Preparation/Initial Study* (SCH No. 2012122013). Elk Grove, CA.

———. 2013b. *Elk Grove Zoning Code*. Through Ordinance 5-2013, passed April 10, 2013. Elk Grove, CA.

3.2 AIR QUALITY

This section examines the air quality in the area of the proposed Project area and in the region, includes a summary of applicable air quality regulations, and analyzes potential air quality impacts associated with the Project.

This section addresses the Project's effect on air quality and compares that to the conclusions of the Sheldon/99 GPA and Rezone Project EIR. This section addresses the comment on the NOP that stated that operation of service vehicles was not addressed in the Sheldon/99 GPA and Rezone Project EIR.

3.2.1 EXISTING SETTING

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, together with the current regulatory structure that applies to the Sacramento Valley Air Basin, which encompasses the City of Elk Grove, pursuant to the regulatory authority of the Sacramento Metropolitan Air Quality Management District (SMAQMD).

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that reduce the potential for high levels of regional and local air pollutants. The following section describes pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project area.

AIR BASIN CHARACTERISTICS

Sacramento Valley Air Basin

The proposed Project is located in the Sacramento Valley Air Basin (SVAB), which is under the jurisdiction of the SMAQMD. The SVAB is relatively flat, bordered by mountains to the east, west, and north and by the San Joaquin Valley to the south. Air flows into the SVAB through the Carquinez Strait, moving across the Sacramento Delta, and bringing with it pollutants from the heavily populated San Francisco Bay Area. The climate is characterized by hot, dry summers and cool, rainy winters. Characteristic of SVAB winter weather are periods of dense and persistent low-level fog, which are most prevalent between storm systems. From May to October, the region's intense heat and sunlight lead to high ozone pollutant concentrations. Summer inversions are strong and frequent, but are less troublesome than those that occur in the fall. Autumn inversions, formed by warm air subsiding in a region of high pressure, have accompanying light winds that do not provide adequate dispersion of air pollutants.

Most precipitation in the SVAB results from air masses moving in from the Pacific Ocean during the winter months. These storms usually move through the area from the west or northwest. Over half the total annual precipitation falls during the winter rainy season (November through February); the average winter temperature is a moderate 49 degrees Fahrenheit (°F). During the summer, daytime temperatures can exceed 100°F. Dense fog occurs mostly in mid-winter and never in the summer. Daytime temperatures from April through October average between 70 and 90°F with extremely low humidity. The inland location and surrounding mountains shelter the valley from much of the ocean breezes that keep the coastal regions moderate in temperature. The only breach in the mountain barrier is the Carquinez Strait, which exposes the midsection of the valley to the coastal air mass.

3.2 AIR QUALITY

Winds across Elk Grove, which encompasses the Project site, are an important meteorological parameter because they control the dilution of locally generated air pollutant emissions and their regional trajectory. Based on data obtained from the Sacramento Executive Airport, the closest station to the City that measures wind speed and direction, southwest winds are the most predominant (CARB 1992).

Meteorological Influences on Air Quality

Regional flow patterns affect air quality patterns by directing pollutants downwind of sources. Localized meteorological conditions, such as moderate winds, disperse pollutants and reduce pollutant concentrations. However, the mountains surrounding the Sacramento Valley can create a barrier to airflow, which can trap air pollutants in the valley when meteorological conditions are right and a temperature inversion exists. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells lie over the valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with smoke from agricultural burning or when temperature inversions trap cool air, fog, and pollutants near the ground (SMAQMD 2011a).

The ozone season (May through October) in the valley is characterized by stagnant morning air or light winds, with the delta sea breeze arriving in the afternoon out of the southwest. Usually the evening breeze transports the airborne pollutants to the north out of the valley. During about half of the days from July to September, however, a phenomenon called the Schultz Eddy prevents this from occurring. Instead of allowing for the prevailing wind patterns to move north and carry the pollutants out of the valley, the Schultz Eddy causes the wind pattern to circle back south. Essentially, this phenomenon causes the air pollutants to be blown south toward the Sacramento area, which exacerbates the pollution levels in the area and increases the likelihood of violating federal or state standards (SMAQMD 2011a).

REGIONAL AMBIENT AIR QUALITY

Motor vehicle transportation, including automobiles, trucks, transit buses, and other modes of transportation, is the major contributor to regional air pollution. Stationary sources were once important contributors to both regional and local pollution, and remain significant contributors in other parts of the State and country. However, their role has been substantially reduced in recent years by pollution control programs, discussed below. Any further progress in air quality improvement now focuses heavily on transportation sources.

Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and State governments have established air quality standards for outdoor or ambient concentrations to protect public health. The national and California ambient air quality standards have been set at levels to protect human health with a determined margin of safety. For some pollutants, there are also secondary standards to protect the environment. Ozone and particulate matter (PM) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb) are considered to be local pollutants because they tend to accumulate in the air locally. In addition to being considered a regional pollutant, PM is considered a local pollutant. In the Sacramento metropolitan region, ozone and PM are of particular concern. Health effects commonly associated with criteria pollutants are summarized in Table 3.2-1.

TABLE 3.2-1
CRITERIA AIR POLLUTANTS – SUMMARY OF COMMON SOURCES AND EFFECTS

Pollutant	Major Man-Made Sources	Human Health & Welfare Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO ₂)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to global warming, and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O ₃)	Formed by a chemical reaction between volatile organic compounds (VOC) and nitrous oxides (NO _x) in the presence of sunlight. VOCs are also commonly referred to as reactive organic gases (ROGs). Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles and dyes.
Particulate Matter (PM ₁₀ & PM _{2.5})	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Sulfur Dioxide (SO ₂)	A colorless, nonflammable gas formed when fuel containing sulfur is burned; when gasoline is extracted from oil; or when metal is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel; damage crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Lead (Pb)	Metallic element emitted from metal refineries, smelters, battery manufacturers, iron and steel producers, use of leaded fuels by racing and aircraft industries.	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: CAPCOA 2011

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

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There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

To date, the California Air Resources Board (CARB) has designated nearly 200 compounds as TACs and has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to a relatively few compounds, one of the most important in California being particulate matter from diesel-fueled engines. In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered as TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter and, because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

Diesel Exhaust

According to the *California Almanac of Emissions and Air Quality* (CARB 2009), the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being PM from diesel-fueled engines (diesel PM). Diesel PM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. The exhaust from diesel engines contains hundreds of different gaseous and particulate components, many of which are toxic. Many of these compounds adhere to the particles, and because diesel particles are so small, they penetrate deep into the lungs. Diesel engine particulate has been identified as a human carcinogen. Mobile sources, such as trucks, buses, automobiles, trains, ships, and farm equipment, are by far the largest source of diesel emissions. Studies show that diesel PM concentrations are much higher near heavily traveled highways and intersections.

Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. No ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a PM exposure method. This method uses CARB's emissions inventory PM₁₀ database, ambient PM₁₀ monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene pose the greatest existing ambient risk, for which data are available, in the State. However, diesel PM poses the greatest health risk among the TACs mentioned. Based on receptor modeling techniques, CARB estimated its health risk to be 360 excess cancer cases per million people in the Sacramento Valley Air Basin. Since 1990, the health risk from diesel PM has been reduced by 52 percent. Overall, levels of most TACs have decreased since 1990, except for para-dichlorobenzene and formaldehyde (CARB 2009).

Unlike criteria pollutants like nitrogen oxide, TACs do not have ambient air quality standards. Since no safe levels of TACs can be determined, there are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. Two types of risk are usually assessed: chronic non-cancer risk and acute non-cancer risk. Diesel PM has been identified as a carcinogenic material but is not considered to have acute non-cancer risks. The State has begun a program of identifying and reducing risks

associated with particulate matter emissions from diesel-fueled vehicles. The plan consists of new regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles, new retrofit requirements for existing on-road, off-road, and stationary diesel-fueled engines and vehicles, and new diesel fuel regulations to reduce the sulfur content of diesel fuel as required by advanced diesel emission control systems. Areas where individuals could be exposed to high levels of diesel exhaust in the City include:

- Railroad operations
- Warehouses
- Schools with a high volume of bus traffic
- High-volume highways
- High-volume arterials and local roadways with a high level of diesel traffic

There are no railroad operations, large-scale warehouses, schools, or high-volume highways near the Project site. However, trucks are considered major sources of diesel-related emissions, and the Project site is adjacent to Elk Grove Boulevard, a high-volume arterial.

Elk Grove Ambient Air Quality

Ambient air quality in the City, and thus at the Project site, can be inferred from ambient air quality measurements conducted at air quality monitoring stations. There is one air quality monitoring station in the City located at Elk Grove-Bruceville Road, which monitors ambient concentrations of ozone. Concentrations of ozone and airborne particulate matter were obtained from a nearby monitoring station located in the City of Sacramento (Sacramento-T Street air monitoring station) (see **Table 3.2-2**). Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered "generally" representative of ambient concentrations affecting the Project site.

Table 3.2-2 summarizes the last three years of published data from the Elk Grove-Bruceville Road and the Sacramento-T Street air monitoring stations. As depicted in **Table 3.2-2**, State and federal ozone standards have been exceeded on several occasions during the last three years of available data.

**TABLE 3.2-2
AMBIENT AIR QUALITY MONITORING DATA FOR THE CITY OF ELK GROVE**

Pollutant Standards	2009	2010	2011
Elk Grove-Bruceville Road Air Quality Monitoring Station			
Ozone			
Max 1-hour concentration (ppm)	0.102	0.106	0.097
Max 8-hour concentration (ppm) (state/federal)	0.087/0.086	0.089/0.089	0.081/0.080
Number of days above state 1-hr standard	2	1	1
Number of days above state/federal 8-hour standard	12/5	6/2	6/1
Sacramento-T Street Air Quality Monitoring Station			
Ozone			

3.2 AIR QUALITY

Pollutant Standards	2009	2010	2011
Max 1-hour concentration (ppm)	0.102	0.092	0.100
Max 8-hour concentration (ppm) (state/federal)	13/4	1/0	5/1
Number of days above state 1-hr standard	3	0	1
Number of days above state/federal 8-hour standard	0.089/0.088	0.074/0.074	0.087/0.087
Respirable Particulate Matter (PM₁₀)			
Max 24-hour concentration (µg/m ³) (state/federal)	50.7/47.8	53.9/53.5	42.2/38.8
Number of days above state/federal standard	6/0	6.1/0	0/0
Fine Particulate Matter (PM_{2.5})			
Max 24-hour concentration (µg/m ³) (state/federal)	50.1/37.7	37/30.6	50.5/50.5
Number of days above state/federal standard	-/3	-/0	-/18.4

Source: CARB 2012a

µg/m³ = micrograms per cubic meter; ppm = parts per million
 – Insufficient or no data currently available to determine the value

3.2.2 REGULATORY FRAMEWORK

Air quality in Elk Grove is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policymaking, education, and a variety of programs. The agencies primarily responsible for improving the air quality in the county are discussed below, along with their individual responsibilities.

AMBIENT AIR QUALITY STANDARDS

Both the US Environmental Protection Agency (EPA) and CARB have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The national and California ambient air quality standards are summarized in Table 3.2-3. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas.

Regulations implementing the federal Clean Air Act and its subsequent amendments established national ambient air quality standards for the six criteria pollutants. California has adopted more stringent state ambient air quality standards for most of the criteria air pollutants. In addition, California has established ambient air quality standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Because of the meteorological conditions in the State, there is a considerable difference between State and federal standards in California.

The ambient air quality standards are intended to protect the public health and welfare, and they incorporate an adequate margin of safety. They are designed to protect those segments of the public most susceptible to respiratory distress, known as sensitive receptors, including asthmatics, the very young, elderly, people weak from other illness or disease, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollution levels somewhat above the ambient air quality standards before adverse health effects are observed.

**TABLE 3.2-3
AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards ¹	National Standards
Ozone	8 Hour	0.070 ppm (137 $\mu\text{g}/\text{m}^3$)	0.075 ppm
	1 Hour	0.09 ppm (180 $\mu\text{g}/\text{m}^3$)	–
Carbon Monoxide	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)
	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)
Nitrogen Dioxide	1 Hour	0.18 ppm (339 $\mu\text{g}/\text{m}^3$)	100 ppb
	Annual Arithmetic Mean	0.030 ppm (57 $\mu\text{g}/\text{m}^3$)	53 ppb
Sulfur Dioxide	24 Hour	0.04 ppm (105 $\mu\text{g}/\text{m}^3$)	N/A
	3 Hour	–	N/A
	1 Hour	0.25 ppm (665 $\mu\text{g}/\text{m}^3$)	75 ppb
Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 $\mu\text{g}/\text{m}^3$	N/A
	24 Hour	50 $\mu\text{g}/\text{m}^3$	150 $\mu\text{g}/\text{m}^3$
Particulate Matter – Fine (PM _{2.5})	Annual Arithmetic Mean	12 $\mu\text{g}/\text{m}^3$	15 $\mu\text{g}/\text{m}^3$
	24 Hour	N/A	35 $\mu\text{g}/\text{m}^3$
Sulfates	24 Hour	25 $\mu\text{g}/\text{m}^3$	N/A
Lead	Calendar Quarter	N/A	1.5 $\mu\text{g}/\text{m}^3$
	30 Day Average	1.5 $\mu\text{g}/\text{m}^3$	N/A
Hydrogen Sulfide	1 Hour	0.03 ppm (42 $\mu\text{g}/\text{m}^3$)	N/A
Vinyl Chloride (chloroethene)	24 Hour	0.01 ppm (26 $\mu\text{g}/\text{m}^3$)	N/A
Visibility-Reducing Particles	8 Hour (10:00 to 18:00 PST)	Extinction coefficient: 0.23/kilometer-visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70%.	N/A

Sources: CARB 2012b

Notes: N/A = not applicable; mg/m^3 = milligrams per cubic meter; ppm = parts per million; ppb = parts per billion; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

1. This table provides a summary of current air quality standards and attainment designations at the time of this analysis. For more information on standards, visit the CARB website at <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

3.2 AIR QUALITY

AMBIENT AIR QUALITY ATTAINMENT STATUS

Table 3.2-4 shows the national and California attainment status for Sacramento County. The region is nonattainment for both federal and state ozone, PM₁₀, and PM_{2.5} standards (CARB 2011).

Areas with air quality that exceed adopted air quality standards are designated as nonattainment areas for the relevant air pollutants. Areas that comply with air quality standards are designated as attainment areas for the relevant air pollutants. Unclassified areas are those with insufficient air quality monitoring data to support a designation of attainment or nonattainment, but are generally presumed to comply with the ambient air quality standard. State Implementation Plans must be prepared by states for areas designated as federal nonattainment areas to demonstrate how the area will come into attainment of the exceeded national ambient air quality standard.

As detailed further below, both CARB and the EPA have established air pollution standards in an effort to protect human health and welfare. Geographic areas are designated attainment if these standards are met and nonattainment if they are not met.

**TABLE 3.2-4
NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY ATTAINMENT STATUS
FOR SACRAMENTO COUNTY**

Pollutant	National	California
1-hour Ozone (O ₃)	–	Nonattainment
8-hour Ozone (O ₃)	Nonattainment	Nonattainment
Coarse Particulate Matter (PM ₁₀)	Nonattainment	Nonattainment
Fine Particulate Matter (PM _{2.5})	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Unclassified/Attainment	Attainment
Nitrogen Dioxide (NO ₂)	Unclassified/Attainment	Attainment
Sulfur Dioxide (SO ₂)	Unclassified	Attainment
Hydrogen Sulfide (H ₂ S)	Unclassified	Unclassified

Source: CARB 2011

Air quality with respect to criteria air pollutants and TACs in the Sacramento Valley Air Basin is regulated by such agencies as the SMAQMD, CARB, and the EPA. Each of these agencies develops rules, regulations, policies, and/or goals to attain the goals or directives imposed through legislation.

FEDERAL

Federal Clean Air Act

At the federal level, the EPA has been charged with implementing national air quality programs. The EPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1963 and was amended in 1970, 1977, and 1990. The EPA is responsible for enforcing the federal Clean Air Act (codified 42 United States Code 7401–7671), as well as the national ambient air quality standards that the EPA establishes.

The CAA required the EPA to establish primary and secondary national ambient air quality standards (NAAQS), which are available at <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>. The CAA also required each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The CAA Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. The EPA has responsibility to review all SIPs to determine conformation to the mandates of the CAAA and determine if implementation will achieve air quality goals. If the EPA determines a SIP to be inadequate, a Federal Implementation Plan may be prepared for the nonattainment area that imposes additional control measures. Failure to submit an approvable SIP or to implement the plan within the mandated time frame may result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

STATE

California Clean Air Act

CARB, a department of the California Environmental Protection Agency, oversees air quality planning and control throughout the State. CARB is primarily responsible for ensuring implementation of the 1989 amendments to the California Clean Air Act (CCAA), responding to the federal CAA requirements, and regulating emissions from motor vehicles and consumer products within the State (Section 209(b) of the federal Clean Air Act grants California the authority to develop its own vehicle emissions standards if those standards are at least as stringent as the federal standards). CARB has established emissions standards for vehicles sold in the State and for various types of equipment available commercially. It also sets fuel specifications to further reduce vehicular emissions.

The CCAA establishes ambient air quality standards for the State and a legal mandate to achieve these standards by the earliest practical date. These standards apply to the same criteria pollutants (described above) as the federal Clean Air Act and also include sulfate, visibility, hydrogen sulfide, and vinyl chloride. The state standards are more stringent than the federal standards and, in the case of PM₁₀ and NO₂, far more stringent.

Senate Bill 656 (Particulate Matter)

In 2003, the California Legislature enacted Senate Bill (SB) 656 to reduce public exposure to PM₁₀ and PM_{2.5} (codified Health and Safety Code 39619). CARB approved a list of the most readily available, feasible, and cost-effective control measures that can be employed by air districts to reduce PM₁₀ and PM_{2.5} (collectively referred to as PM) in 2004. The list is based on rules, regulations, and programs existing in the State as of January 1, 2004, for stationary, area-wide, and mobile sources. In 2005, air districts adopted implementation schedules for selected measures from the list. The implementation schedules identify the appropriate subset of measures and the dates for final adoption, implementation, and the sequencing of selected control measures. In developing the implementation schedules, each air district prioritized measures based on the nature and severity of the PM problem in their area and cost effectiveness. Consideration was also given to ongoing programs such as measures being adopted to meet national air quality standards or the state ozone planning process.

3.2 AIR QUALITY

Toxic Air Contaminant Programs

California regulates TACs primarily through the Tanner Air Toxics Act (Assembly Bill (AB) 1807; codified Health and Safety Code Sections 39650–39675) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588 and amended with SB 1731; codified Health and Safety Code Sections 44300–44394). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted the EPA's list of hazardous air pollutants as TACs. Most recently, diesel exhaust particulate was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure 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 toxic best available control technology to minimize emissions. None of the TACs identified by CARB have a safe threshold.

The Hot Spots Act requires that existing facilities that emit toxic substances above a specified level:

- Prepare a toxic emissions inventory.
- Prepare a risk assessment if emissions are significant.
- Notify the public of significant risk levels.
- Prepare and implement risk reduction measures.

CARB has adopted diesel exhaust control measures and more stringent emissions standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, CARB adopted a new public transit bus fleet rule and emissions standards for new urban buses. These new rules and standards provide for (1) more stringent emissions standards for some new urban bus engines beginning with 2002 model year engines, (2) zero-emissions bus demonstration and purchase requirements applicable to transit agencies, and (3) reporting requirements with which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Milestones include the low-sulfur diesel fuel requirement and tighter emissions standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide. Over time, the replacement of older vehicles will result in a vehicle fleet that produces substantially fewer TACs than under current conditions.

Mobile-source emissions of TACs (e.g., benzene, 1-3-butadiene, diesel PM) have been reduced significantly over the last decade and will be reduced further in the State through a progression of regulatory measures (e.g., low emission vehicle/clean fuels and Phase II reformulated gasoline regulations) and control technologies. With implementation of CARB's Risk Reduction Plan, it is expected that diesel PM concentrations will be reduced by 85 percent in 2020 from the estimated year 2000 level. Adopted regulations are also expected to continue to reduce formaldehyde emissions from cars and light-duty trucks. As emissions are reduced, it is expected that risks associated with exposure to the emissions will also be reduced.

LOCAL**Sacramento Metropolitan Air Quality Management District**

The SMAQMD coordinates the work of government agencies, businesses, and private citizens to achieve and maintain healthy air quality for the Sacramento area. The 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, NO_x, 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

As previously stated, the region is nonattainment for both federal and state ozone standards. The federal 8-hour ozone regulations require that areas classified as serious or above submit a reasonable further progress demonstration plan that shows a minimum of 18 percent volatile organic compound (and/or NO_x) emissions 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 (SMAQMD 2008) includes the information and analyses to fulfill CAA requirements for demonstrating reasonable further progress toward attaining the 8-hour ozone NAAQS for the Sacramento region. In addition, this plan establishes an updated emissions inventory and maintains existing motor vehicle emissions 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 EPA 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 emissions 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 EPA approved the request, effective June 4, 2010.

Sacramento Area Regional PM₁₀ Attainment Plan

As previously stated, the region is nonattainment for both national and California PM₁₀ and PM_{2.5} standards. The SMAQMD (2010) has prepared the PM₁₀ Implementation/Maintenance Plan and Re-Designation Request for Sacramento County in compliance with the federal CAA requirements pertaining to PM₁₀ nonattainment areas. The purpose of this plan is to fulfill the requirements for the EPA to redesignate Sacramento County from nonattainment to attainment of the PM₁₀ NAAQS by preparing the following plan elements and tasks:

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- Documenting the extent of the PM₁₀ problem in Sacramento County.
- Determining the emissions inventory sources contributing to the PM₁₀ problem.
- Identifying the appropriate control measures that achieved attainment of the PM₁₀ NAAQS.
- Demonstrating maintenance of the PM₁₀ NAAQS.
- Requesting formal redesignation to attainment of the PM₁₀ NAAQS.

The 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 Project are identified as follows (SMAQMD 2011a):

- *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.
- *Rule 442: Architectural Coatings.* The purpose of this rule is to limit the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the District.

City of Elk Grove General Plan

The Conservation and Air Quality Element of the General Plan (City of Elk Grove 2005) addresses air quality-related issues in the City. The element includes various policies that are intended to protect air quality. The following policies of the Conservation and Air Quality Element would have a mitigating effect with respect to air quality impacts.

"Policy CAQ-32: As part of the environmental review of projects, the City shall identify the air quality impacts of development proposals to avoid significant adverse impacts and require appropriate *mitigation measures*, potentially including—in the case of projects which may conflict with applicable air quality plans—emission reductions in addition to those required by Policy CAQ-30.

"Policy CAQ-33: The City shall require that public and private development projects use low emission vehicles and equipment as part of project construction and operation, unless determined to be infeasible."

This section of the Draft SEIR identifies the potential air quality impacts resulting from the project and implementation of mitigation measures included in this section, and requirements imposed by the City would ensure consistency with these policies.

3.2.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the application of the CEQA Guidelines Appendix G Environmental Checklist. An air quality impact is considered significant if implementation of the Project will:

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

METHODOLOGY

The Sheldon/99 GPA and Rezone Environmental Impact Report (EIR) (SCH No. 2007122045) addressed air quality issues related to the conversion of vacant and rural residential land to residential and commercial uses.

The proposed Project will be subject to the Mitigation Monitoring and Reporting Program (MMRP) adopted for the Sheldon/99 GPA and Rezone EIR, including implementation of mitigation measures required to reduce air quality impacts. The Sheldon/99 GPA and Rezone EIR MMRP is included in Appendix A of this Draft SEIR.

The impact evaluation below utilizes the analyses completed for the Sheldon/99 GPA and Rezone EIR to determine whether implementation of the proposed Project would result in a new impact to air quality not previously addressed in the Sheldon/99 GPA and Rezone EIR, or increase the severity of previously identified Sheldon/99 GPA and Rezone EIR Impacts 4.7.1 through 4.7.3.

Short-term construction-related and long-term operational air quality impacts are disclosed and assessed in accordance with methodologies recommended by CARB and the SMAQMD and in comparison to the recommended SMAQMD construction significance threshold of 85 pounds per day of NO_x and operational significance threshold of 65 pounds per day of NO_x and ROG. Both short-term construction-related emissions and long-term operational emissions associated with the proposed Project were calculated using the California Emissions Estimator Model (CalEEMod), version 2011.1.1, computer program. This model was developed in coordination with the South Coast Air Quality Management District and is the most current emissions model approved for use within the State of California by various air districts. Output from the model runs for both construction and operational activity are provided in Appendix C.

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Localized CO Concentrations

The SMAQMD provides a project-level screening procedure to determine whether detailed CO hotspot modeling is required for a proposed development project. Analysis of localized CO impacts relies on the screening methodologies recommended by the SMAQMD. Potential short-term exposure to CO associated with the proposed Project was qualitatively assessed based on a review of project-generated traffic volumes and predicted intersection levels of service.

Exposure to Toxic Air Pollutants

Exposure to localized concentrations of TACs were assessed based on a review of stationary sources within 2,640 feet of the project site per the SMAQMD. Potential increases in risk associated with the future development of new sources associated with the Project were also qualitatively assessed. Potential exposure to localized mobile-source pollutants were qualitatively assessed based on a review of major roadways in the vicinity of the proposed Project site and associated predicted risks provided by the SMAQMD.

Exposure to Odorous Emissions

The SMAQMD considers appropriate land use planning the primary method to mitigate odor impacts. Providing a sufficient buffer zone between sensitive receptors and odor sources should be considered prior to analyzing implementation of odor mitigation technology. In accordance with SMAQMD methodologies, potential exposure to odorous emissions was qualitatively assessed, based on a review of nearby potential odor-generating sources obtained from the SMAQMD.

PROJECT IMPACTS AND MITIGATION MEASURES

Short-Term or Construction-Related Air Quality Impacts (Standards of Significance 1 and 2)

Impact 3.2.1 Construction activities associated with the development of the proposed Project would generate fewer potential criteria air pollutants than the SMAQMD significance thresholds, and would comply with the construction mitigations identified in the Sheldon/99 GPA and Rezone EIR. **The proposed Project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts.**

Three basic sources of short-term emissions will be generated through implementation of the proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils will generate exhaust emissions and fugitive particulate matter emissions that will affect local air quality at various times during construction. Effects will be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation.

Construction activities will be subject to SMAQMD Rule 403 that requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways, or the clearing of land where possible and applying asphalt, oil, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces, which can give rise to airborne dust.

The previous analysis under the Sheldon/99 GPA and Rezone EIR, of which this Project is a part, found that construction activities associated with the development of residential and commercial uses would contribute to regional pollutants, such as ROG, NO_x, and PM₁₀, to a level that is potentially significant. However, the potential impact was considered less than significant with implementation of MM 4.7.1a through 4.7.1f, which require construction emissions reduction mechanisms. The Sheldon/99 GPA and Rezone EIR mitigation measures address air quality impacts resulting from construction, including the requirements to water all exposed surfaces; complete daily washing and sweeping; apply paving, water, or soil stabilizers to unpaved access roads, parking areas, and staging areas; cover transported materials; limit vehicle speeds; and maintain 2 feet of freeboard when transporting soil or other materials (see Appendix A).

Because the Sheldon/99 GPA and Rezone EIR does not provide emissions estimates specifically for the Project site, emissions for proposed land uses were modeled to assess emissions under the proposed Project scenarios. As shown in Table 3.2-5, construction activities associated with the mitigated Project would produce 35.43 lbs/day of ROG, 12.37 lbs/day of NO_x, 1.22 lbs/day of PM₁₀, and 0.96 lbs/day of PM_{2.5}.

**TABLE 3.2-5
SHORT-TERM CRITERIA AIR POLLUTANTS UNDER PROPOSED PROJECT – POUNDS PER DAY**

Source	ROG	NO _x	PM ₁₀	PM _{2.5}
Unmitigated	35.43	12.37	1.63	1.19
Mitigated	35.43	12.37	1.22	0.96

Source: Emissions modeled by PMC using the California Emissions Estimator Model (CalEEMod), version 2011.1.1. Notes: Diesel-fueled construction equipment load factors reduced by 33% to account for off-road emissions overestimation (per CARB 2010). Projected emissions account for Sacramento Metropolitan Air Quality Management District Rule 442, Architectural Coatings, which limits the amount of ROG per liter of paint. See **Appendix C** for modeling outputs.

As shown above in Table 3.2-5, Project emissions resulting from construction will not exceed the SMAQMD significance criterion of 85 pounds per day of NO_x. Although the potential to locally exceed the California ambient air quality standard for PM₁₀ exists with the proposed Project, the SMAQMD has no established daily thresholds for PM₁₀ during construction activities due to the temporary generation of these emissions. While construction impacts are temporary and will cease once construction is completed, they nevertheless will have an effect on PM emissions while such activities occur. As previously discussed, the Project will be subject to the MMRP adopted for the Sheldon/99 GPA and Rezone EIR, including implementation of mitigation measures required to reduce air quality impacts described above. Adherence to Sheldon/99 GPA and Rezone EIR mitigation measures will further reduce construction-generated air pollutants for nuisance conditions in accordance with SMAQMD regulations by requiring individual construction activities to perform dust control measures to prevent the emissions of fugitive airborne dust and the required utilization of lower-emissions construction vehicles. Therefore, construction-related air quality impacts will be considered **less than significant**.

Mitigation Measures

None required.

Long-Term Increases of Criteria Air Pollutants (Standards of Significance 1 and 2)

Impact 3.2.2 Implementation of the proposed Project will result in long-term increases in criteria air pollutants that are below the threshold levels identified by the

3.2 AIR QUALITY

SMAQMD. This change increase considered in the previous document and was found to be significant and unavoidable. **The proposed Project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts.**

The proposed Project would generate long-term emissions associated with the operation of the 27,430 square feet of commercial uses on site. During long-term operations, the proposed Project would cause a maximum 17.12 lbs/day of ROG, 23.99 lbs/day of NO_x, 19.52 lbs/day of PM₁₀, and 1.07 lbs/day of PM_{2.5}, as shown in Table 3.2-6.

**TABLE 3.2-6
LONG-TERM CRITERIA AIR POLLUTANTS UNDER PROPOSED PROJECT – POUNDS PER DAY**

Source	ROG	NO _x	PM ₁₀	PM _{2.5}
Summer	17.12	23.99	19.51	1.06
Winter	15.04	23.69	19.52	1.07
SMAQMD Potentially Significant Impact Threshold	65 pounds/day	65 pounds/day	None	None
Exceed SMAQMD Threshold?	No	No		

Source: Emissions modeled by PMC using the California Emissions Estimator Model (CalEEMod), version 2011.1.1. Notes: Diesel-fueled construction equipment load factors reduced by 33% to account for off-road emissions overestimation (per CARB 2010). Projected emissions account for Sacramento Metropolitan Air Quality Management District Rule 442, Architectural Coatings, which limits the amount of ROG per liter of paint. See **Appendix C** for modeling outputs.

As shown in Table 3.2-6 above, emissions resulting from the proposed Project will not exceed the SMAQMD significance criteria of 65 pounds per day of either ROG or NO_x. Additionally, the proposed Project would incorporate the MMRP identified in the Sheldon/99 GPA and Rezone EIR. This proposed Project would be subject to all adopted mitigations in the Sheldon/99 GPA and Rezone EIR. The previous EIR adequately addresses this impact.

The long-term increases in criteria air pollutants resulting from the implementation of the Sheldon/99 GPA and Rezone EIR were determined to be significant and unavoidable. The impact is addressed by MM 4.7.3, which requires the preparation of an Air Quality Mitigation Plan to reduce long-term increases in criteria air pollutants by 15 percent. The proposed Project would comply with adopted MM 4.7.3 to reduce the severity of the criteria air pollutant impact (see Appendix A).

The Sheldon/99 GPA and Rezone EIR concluded that long-term health risks from TACs associated with short-term construction activities would be less than significant because the use of diesel-powered construction equipment, a source of TACs, would be temporary and episodic and would occur over a relatively large area. In addition, measures required by the SMAQMD, the air quality control agency for the region, for the control of particulate emissions from on-site construction equipment would substantially reduce emissions of diesel-exhaust PM. For these reasons, the Sheldon/99 GPA and Rezone EIR found that the diesel-exhaust PM generated by construction would not be expected to create conditions where the probability of contracting cancer is greater than 10 in 1 million for nearby receptors.

Although the long-term increases in criteria air pollutants resulting from the implementation of the Sheldon/99 GPA and Rezone EIR were determined to be significant and unavoidable, the proposed Project will not exceed the SMAQMD significance criteria of 65 pounds per day of either ROG or NO_x. Additionally, the proposed Project would comply with adopted MM 4.7.3 of

the Sheldon/99 GPA and Rezone EIR. Therefore, because the proposed Project is below SMAQMD thresholds and would comply with mitigations from the Sheldon/99 GPA and Rezone EIR, **the proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

Mitigation Measures

None required.

Contribution to Near-Term Local Mobile-Source CO Concentrations (Standard of Significance 4)

Impact 3.2.3 Implementation of the proposed Project would not contribute to localized concentrations of mobile-source CO that would exceed applicable standards. **The proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

The primary mobile-source criteria pollutant of local concern is carbon monoxide (CO). As noted previously, Sacramento County, and thus the City of Elk Grove, is currently designated attainment for both California and national CO ambient air quality standards, and the county typically experiences low background CO concentrations.

Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hotspots," are typically associated with intersections that are projected to operate at unacceptable levels of service (LOS) during the peak commute hours. Modeling is therefore typically conducted for intersections that are projected to operate at unacceptable LOS during peak commute hours.

The SMAQMD provides a tiered project-level screening procedure to determine whether detailed CO hotspot modeling is required for a proposed development project (SMAQMD 2011a). This preliminary screening methodology provides lead agencies with a conservative indication of whether project-generated vehicle trips would result in the generation of CO emissions that contribute to an exceedance of the thresholds of significance. According to the SMAQMD first tier CO screening standard, the proposed Project would result in a less than significant impact to air quality for local CO if:

- Traffic generated by the proposed project would not result in deterioration of intersection LOS to LOS E or F;¹ or
- The project would not contribute additional traffic to an intersection that already operates at LOS E or F.

¹ Level of service (LOS) is used to describe the ability of a roadway to accommodate prevailing traffic volumes at the critical intersections based on the physical characteristics of the roadway. LOS A is considered the most efficient level of service and LOS F the least efficient.

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Based on the traffic analysis prepared for this Project, the proposed Project would result in deterioration of the following traffic intersection from LOS E to LOS F under cumulative conditions, thus contributing additional traffic to an intersection that already operates at an unacceptable LOS.

Intersection: Sheldon Road/East Stockton Boulevard (Cumulative Plus Project Conditions)

Since the Sheldon Road/East Stockton Boulevard intersection is projected to operate at an unacceptable LOS with project implementation, it is compared to the SMAQMD second tier CO screening standard, which states that the proposed Project would result in a less than significant impact to air quality for local CO if:

- The project will not result in an affected 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).

According to the traffic report prepared for the Project (Fehr & Peers 2012, Figure 4), the Sheldon Road/East Stockton Boulevard intersection would accommodate 5,771 vehicles during the PM peak hour and 5,887 vehicles at the AM peak hour under cumulative conditions. In addition, the project would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway and the mix of vehicle types are not anticipated to be any different from the County average.

As such, the proposed project would not exceed the SMAQMD's significance thresholds for CO and this would be considered a **less than significant impact**.

Mitigation Measures

None required.

Long-Term Exposure of Sensitive Receptors to Toxic Air Contaminants (Standard of Significance 4)

Impact 3.2.4 Implementation of the proposed Project would not result in increased exposure of sensitive receptors to mobile-source toxic air contaminants; therefore, **the proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

The Sheldon/99 GPA and Rezone EIR determined that there would be a less than significant impact related to exposure to toxic air contaminants (Impact 4.7.3, page 4.2-27). The proposed Project does not include uses that would emit toxic pollutants as a byproduct. It was further determined that use of toxic substances which could involve an air release would be subject to regulatory control under the permitting authority of the SMAQMD; based on this requirement to obtain permits, impacts were considered to be less than significant. The Sheldon/99 GPA and Rezone EIR concluded that long-term health risks from TACs associated with short-term construction activities would also be less than significant because the use of diesel-powered construction equipment, a source of TACs, would be temporary and episodic and would occur over a relatively large area. In addition, measures required by the SMAQMD for the control of particulate emissions from on-site construction equipment would substantially reduce emissions

of diesel-exhaust PM. For these reasons, the Sheldon/99 GPA and Rezone EIR found that the diesel-exhaust PM generated by construction would not be expected to create conditions where the probability of contracting cancer is greater than 10 in 1 million for nearby receptors (see page 4.7-27 of the Sheldon/99 GPA and Rezone EIR).

According to the SMAQMD, when a project would include the development of new sensitive receptors, all sources of TACs that could potentially affect the proposed development within a half mile (2,640 feet) of the proposed project site should be analyzed. The uses included in the proposed Project would not be considered new sensitive receptors.

Although the proposed Project does not include development of new sensitive receptors, peak-hour volumes along the nearby State Route 99 segment will most likely experience increases in the future, and thus increase diesel PM emissions. However, recent regulations imposed by CARB are anticipated to substantially reduce these future emissions. The On-Road Heavy-Duty Diesel Vehicles (In Use) Regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions (CARB 2012). Heavier trucks were required to be retrofitted with PM filters beginning January 1, 2012, and older trucks must be replaced starting January 1, 2015 (CARB 2012). By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent (CARB 2012). The regulation applies to nearly all privately and federally-owned diesel-fueled trucks and buses, as well as to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds (CARB 2012). This regulation ensures that future diesel PM emissions associated with an increase peak-hour volume of traffic along the nearby State Route 99 segment will be negligible.

The Sheldon/99 GPA and Rezone EIR determined that there would be a less than significant impact related to exposure to toxic air contaminants. Because the proposed Project does not include development of any new sensitive receptors, exposure of proposed sensitive receptors associated with the proposed project to existing stationary and mobile sources of TACs is also considered a less than significant impact. **The proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

Mitigation Measures

None required.

Exposure of Sensitive Receptors to Odorous Emissions (Standard of Significance 5)

Impact 3.2.5 Implementation of the proposed Project would not result in increased exposure of sensitive receptors to odorous emissions. As a result, the **proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

The Sheldon/99 GPA and Rezone EIR determined that odor impacts of changing land uses from their current state to residential and commercial uses were less than significant (see page 4.7-24 of the Sheldon/99 GPA and Rezone EIR). The SMAQMD has adopted guidelines for determining potential adverse impacts involving odors and does not recognize the uses listed under the proposed Project as potential emitters of odors. Therefore, the changes proposed for the Project would not substantially worsen odor impacts beyond what was already considered in the Sheldon/99 GPA and Rezone EIR. Therefore, the **proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

3.2 AIR QUALITY

Mitigation Measures

None required.

3.2.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for air quality is the Sacramento Valley Air Basin (SVAB). The basin includes the county of Sacramento, and parts of Solano, Yolo, Placer, Yuba, Colusa, Butte, Glenn, Tehama, Shasta, and Sutter counties. The climate and geography of the lower SVAB severely limits the dilution and transportation of any air pollutants that are released to the atmosphere. At current levels of development (residential, commercial, industrial, etc.) and activity, the air basin exceeds the state/federal ambient standards for particulates and ozone. Though the proposed Project in itself will not result in significant increases in emissions that will impact regional air quality, cumulative growth in population, vehicle use, and industrial activity in the SVAB region could inhibit efforts to improve regional air quality and attain the ambient air quality standards.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Result in a Cumulatively Considerable Net Increase in Nonattainment Criteria Pollutant (Standard of Significance 3)

Impact 3.2.6 Implementation of the proposed Project, in combination with growth throughout the air basin, will not exacerbate existing regional problems with ozone and particulate matter. **The proposed Project would not result in a new significant cumulative impact or substantially increase the severity of a previously identified significant impact.**

Due to the region's nonattainment status for ozone and PM₁₀, the Sheldon/99 GPA and Rezone EIR determined that the cumulative impact is considered significant and unavoidable. If Project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NO_x) or PM₁₀ exceed the long-term SMAQMD thresholds, the Project's cumulative impacts would be considered significant as determined by the SMAQMD. In addition, if the Project results in a change in land use and corresponding increases in vehicle miles traveled (VMT), the resultant increase in VMT may not be accounted for in regional emissions inventories contained in regional air quality control plans such as the Sacramento Area Regional Ozone Attainment Plan and/or the Sacramento Area Regional PM₁₀ Attainment Plan. Substantial increases in VMT that are not accounted for in the emissions inventory may result in a cumulative contribution to the region's existing air quality nonattainment status.

As discussed in Impact 3.2.2, predicted long-term operational emissions attributable to the proposed Project will not exceed SMAQMD significance thresholds. The proposed Project would include the construction of approximately 27,430 square feet of commercial buildings on 4.46 acres, the impact of which was already considered by the Elk Grove City Council as part of the Sheldon/99 GPA and Rezone project (see page 4.7-3 of the Sheldon/99 GPA and Rezone EIR and associated Findings of Fact). For these reasons, the proposed Project will not conflict with either the Sacramento Area Regional Ozone Attainment Plan or the Sacramento Area Regional PM₁₀ Attainment Plan. The proposed Project would not result in the exceedance of long-term emissions thresholds. Therefore, although the Sheldon/99 GPA and Rezone EIR determined that the cumulative impact would be significant and unavoidable, the Project would not result in a cumulatively considerable contribution to regional problems with ozone and particulate matter.

The proposed Project would not result in a new significant cumulative impact or substantially increase the severity of a previously identified significant impact.

Mitigation Measures

None required.

3.2 AIR QUALITY

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3.3 GREENHOUSE GASES AND CLIMATE CHANGE

3.3 GREENHOUSE GASES AND CLIMATE CHANGE

CEQA requires that lead agencies consider the reasonably foreseeable adverse environmental effects of projects they are considering for approval. This section discusses climate change and the potential for development under the proposed Project to produce greenhouse gases (GHG), which are associated with global climate change. This section considers emissions related to a variety of sources including construction, vehicular traffic, energy, and water consumption, as well as waste water and solid waste generation.

This section addresses the Project's possible contributions to global climate change and its relationship to the City's Climate Action Plan (CAP). This analysis ensures consistency with the CAP and proposes several of the measures from the CAP as mitigation. The original Sheldon/99 GPA Rezone EIR was completed before analysis of GHG emissions became a requirement of CEQA. This section addresses comments requesting the EIR analysis be consistency with the CAP.

3.3.1 EXISTING SETTING

Since the early 1990s, scientific consensus has held that the world's population is releasing GHGs faster than the earth's natural systems can absorb them. These gases are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

While often used interchangeably, there is a difference between the terms "climate change" and "global warming." According to the National Academy of Sciences, climate change refers to any significant, measurable change of climate lasting for an extended period of time that can be caused by both natural factors and human activities. Global warming, on the other hand, is an average increase in the temperature of the atmosphere caused by increased GHG emissions. The use of the term climate change is becoming more prevalent because it encompasses all changes to the climate, not just temperature.

To fully understand climate change, it is important to recognize the naturally occurring greenhouse effect and to define the GHGs that contribute to this phenomenon. Solar radiation enters the 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. GHGs, 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.

For most nonindustrial development projects, motor vehicles make up the bulk of GHG emissions produced on an operational basis. The primary GHGs emitted by motor vehicles include CO₂, CH₄, N₂O, and hydrofluorocarbons (CARB 2004). **Table 3.3-1** provides descriptions of the primary GHGs attributed to global climate change, including a description of their physical properties, primary sources, and their contribution to the greenhouse effect.

3.3 GREENHOUSE GASES AND CLIMATE CHANGE

**TABLE 3.3-1
GREENHOUSE GASES**

Greenhouse Gas	Description
Carbon Dioxide (CO ₂)	Carbon dioxide is a colorless, odorless gas. CO ₂ is emitted in a number of ways, both naturally and through human activities. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO ₂ emissions. The atmospheric lifetime of CO ₂ is variable because it is so readily exchanged in the atmosphere. ¹
Methane (CH ₄)	Methane is a colorless, odorless gas that is not flammable under most circumstances. CH ₄ is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of methane to the atmosphere. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. Methane's atmospheric lifetime is about 12 years. ²
Nitrous Oxide (N ₂ O)	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. N ₂ O is produced by both natural and human-related sources. Primary human-related sources of N ₂ O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N ₂ O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. ³
Hydrofluorocarbons (HFCs)	Hydrofluorocarbons are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HCFC-22 (or Freon 22, used in air conditioning applications). The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 260 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes of less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years). ⁴
Perfluorocarbons (PFCs)	Perfluorocarbons are colorless, highly dense, chemically inert, and nontoxic. There are seven PFC gases: perfluoromethane (CF ₄), perfluoroethane (C ₂ F ₆), perfluoropropane (C ₃ F ₈), perfluorobutane (C ₄ F ₁₀), perfluorocyclobutane (C ₄ F ₈), perfluoropentane (C ₅ F ₁₂), and perfluorohexane (C ₆ F ₁₄). Natural geological emissions have been responsible for the PFCs that have accumulated in the atmosphere in the past; however, the largest current source is aluminum production, which releases CF ₄ and C ₂ F ₆ as byproducts. The estimated atmospheric lifetimes for CF ₄ and C ₂ F ₆ are 50,000 and 10,000 years, respectively. ^{4,5}
Sulfur Hexafluoride (SF ₆)	Sulfur hexafluoride is an inorganic compound that is colorless, odorless, nontoxic, and generally nonflammable. SF ₆ is primarily used as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80 percent of all SF ₆ produced worldwide. Significant leaks occur from aging equipment and during equipment maintenance and servicing. SF ₆ has an atmospheric life of 3,200 years. ⁴

Sources: ¹EPA 2011a, ²EPA 2011b, ³EPA 2010a, ⁴EPA 2010b, ⁵EFCTC 2003

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Gases with high global warming potential, such as HFCs, PFCs, and SF₆, are the most heat-absorbent. Methane traps over 21 times more heat per molecule than CO₂, and N₂O absorbs 310 times more heat per molecule than CO₂. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e), which weight each gas by its global warming potential (GWP). Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted. **Table 3.3-2** shows the GWPs for different GHGs for a 100-year time horizon.

**TABLE 3.3-2
GLOBAL WARMING POTENTIAL FOR GREENHOUSE GASES**

Greenhouse Gas	Global Warming Potential
Carbon Dioxide (CO ₂)	1
Methane (CH ₄)	21
Nitrous Dioxide (N ₂ O)	310
Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs)	6,500
Sulfur Hexafluoride (SF ₆)	23,900

Source: California Climate Action Registry 2009

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 is a significant emitter of CO₂ in the world and produced 477 million gross metric tons of CO₂e in 2008 (CARB 2010a). Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2008, accounting for 36.4 percent of total GHG emissions in the State (CARB 2010a). This category was followed by the electric power sector (including both in-state and out-of-state sources) (24.3 percent) and the industrial sector (19.3 percent) (CARB 2010a).

EFFECTS OF GLOBAL CLIMATE CHANGE

California can draw on substantial scientific research conducted by experts at various state universities and research institutions. With more than a decade of concerted research, scientists have established that the early signs of climate change are already evident in the State—as shown, for example, in increased average temperatures, changes in temperature extremes, reduced snowpack in the Sierra Nevada, sea level rise, and ecological shifts.

Many of these changes are accelerating—locally, across the country, and around the globe. As a result of emissions already released into the atmosphere, California is anticipated to face intensifying climate changes in coming decades (CNRA 2009). Generally, research indicates that California should expect overall hotter and drier conditions with a continued reduction in winter snow (with concurrent increases in winter rains), as well as increased average temperatures, and accelerating sea-level rise. In addition to changes in average temperatures, sea level, and precipitation patterns, the intensity of extreme weather events is also changing (CNRA 2009).

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Climate change temperature projections identified in the 2009 California Climate Adaptation Strategy suggest the following (CNRA 2009):

- Average temperature increase is expected to be more pronounced in the summer than in the winter season.
- Inland areas are likely to experience more pronounced warming than coastal regions.
- Heat waves are expected to increase in frequency, with individual heat waves also showing a tendency toward becoming longer, and extending over a larger area, thus more likely to encompass multiple population centers in California at the same time.
- As GHGs remain in the atmosphere for decades, temperature changes over the next 30 to 40 years are already largely determined by past emissions. By 2050, temperatures are projected to increase by an additional 1.8 to 5.4°F (an increase one to three times as large as that which occurred over the entire 20th century).
- By 2100, the models project temperature increases between 3.6 and 9°F.

Precipitation levels are expected to change over the 21st century, though models differ in determining where and how much rain and snowfall patterns may change (CNRA 2009). Eleven out of twelve precipitation models run by the Scripps Institution of Oceanography suggest a small to significant (12–35 percent) overall decrease in precipitation levels by mid-century (CNRA 2009). In addition, higher temperatures increase evaporation and make for a generally drier climate, as higher temperatures hasten snowmelt. Moreover, the 2009 California Climate Adaptation Strategy concludes that more precipitation may fall as rain rather than as snow, with important implications for water management in the State. California communities have largely depended on runoff from yearly established snowpack to provide the water supplies during the warmer, drier months of late spring, summer, and early autumn. With rainfall and meltwater running off earlier in the year, the State may face increasing challenges of storing the water for the dry season, while protecting Californians downstream from floodwaters during the wet season.

According to the 2009 California Climate Adaptation Strategy, the impacts of climate change in California have the potential to include, but are not limited to, the areas discussed in **Table 3.3-3**.

**TABLE 3.3-3
POTENTIAL STATEWIDE IMPACTS FROM CLIMATE CHANGE**

Potential Statewide Impact	Description
Public Health	Climate change is expected to lead to an increase in ambient (i.e., outdoor) average air temperature, with greater increases expected in summer than in winter months. Larger temperature increases are anticipated in inland communities as compared to the California coast. The potential health impacts from sustained and significantly higher than average temperatures include heat stroke, heat exhaustion, and the exacerbation of existing medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Numerous studies have indicated that there are generally more deaths during periods of sustained higher temperatures, and these are due to cardiovascular causes and other chronic diseases. The elderly, infants, and socially isolated people with preexisting illnesses who lack access to air conditioning or cooling spaces are among the most at risk during heat waves.

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Potential Statewide Impact	Description
Floods and Droughts	<p>The impacts of flooding can be significant. Results may include population displacement, severe psychosocial stress with resulting mental health impacts, exacerbation of preexisting chronic conditions, and infectious disease. Additionally, impacts can range from a loss of personal belongings, and the emotional ramifications from such loss, to direct injury and/or mortality.</p> <p>Drinking water contamination outbreaks in the US are associated with extreme precipitation events. Runoff from rainfall is also associated with coastal contamination that can lead to contamination of shellfish and contribute to food-borne illness. Floodwaters may contain household, industrial, and agricultural chemicals as well as sewage and animal waste. Flooding and heavy rainfall events can wash pathogens and chemicals from contaminated soils, farms, and streets into drinking water supplies. Flooding may also overload storm and wastewater systems, or flood septic systems, also leading to possible contamination of drinking water systems.</p> <p>Drought impacts develop more slowly over time. Risks to public health that Californians may face from drought include impacts on water supply and quality, food production (both agricultural and commercial fisheries), and risks of waterborne illness. As surface water supplies are reduced as a result of drought conditions, the amount of groundwater pumping is expected to increase to make up for the water shortfall. The increase in groundwater pumping has the potential to lower the water tables and cause land subsidence. Communities that utilize well water will be adversely affected by drops in water tables or through changes in water quality. Groundwater supplies have higher levels of total dissolved solids compared to surface waters. This introduces a set of effects for consumers, such as repair and maintenance costs associated with mineral deposits in water heaters and other plumbing fixtures, and on public water system infrastructure designed for lower salinity surface water supplies. Drought may also lead to increased concentration of contaminants in drinking water supplies.</p>
Water Resources	<p>The State's water supply system already faces challenges to provide water for California's growing population. Climate change is expected to exacerbate these challenges through increased temperatures and possible changes in precipitation patterns. The trends of the last century—especially increases in hydrologic variability—will likely intensify in this century. The State can expect to experience more frequent and larger floods and deeper droughts. Rising sea level will threaten the Delta water conveyance system and increase salinity in near-coastal groundwater supplies. Planning for and adapting to these simultaneous changes, particularly their impacts on public safety and long-term water supply reliability, will be among the most significant challenges facing water and flood managers this century.</p>
Forests and Landscapes	<p>Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, wildfire occurrence statewide could increase from 57 percent to 169 percent by 2085. 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.</p>
Sea Level Rise	<p>The San Francisco Bay Conservation and Development Commission issued a report on sea level rise in April 2009, predicting sea level rise along the West Coast of approximately 7.9 inches per century, or approximately 0.08 inches per year. However, the rate of sea level rise is increasing. During the period of 1993–2003, the rate was approximately 0.12 inches per year. The commission uses the same sea level rise estimates that are used by California Climate Action Team-funded assessments. These estimates anticipate the sea level in the Bay Area will rise 16 inches by mid-century and 55 inches by the end of the century.</p>

Source: CNRA 2009

3.3 GREENHOUSE GASES AND CLIMATE CHANGE

Current Greenhouse Gas Emissions

Statewide Inventory

The California GHG inventory compiles statewide anthropogenic GHG emissions and sinks. It includes estimates for CO₂, CH₄, N₂O, SF₆, nitrogen trifluoride (NF₃), HFCs, and PFCs. The current inventory covers years 2000 to 2008.

Annual statewide emissions inventories provide the basis for establishing historical emissions trends. Trends are useful in tracking progress toward a specific goal or target. There are many factors affecting GHG emissions, including the state of the economy, changes in demography, improved efficiency, and changes in environmental conditions such as drought. 2008 saw a small decrease in statewide GHG emissions, driven by a noticeable drop in on-road transportation emissions. 2008 also reflects the beginning of the economic recession and fuel price spikes. California generated approximately 484,700,000 metric tons of GHG emissions in 2008 and 456,700,000 metric tons in 2009 (CARB 2011a).

City of Elk Grove Inventory

On March 27, 2013, the City of Elk Grove adopted a GHG inventory as part of the City's CAP. The CAP presents GHG emissions for both municipal operations and community-wide activities in 2005, including transportation, waste, water, agriculture, and energy-related activities. The inventory establishes a baseline that provides an understanding of major sources of existing GHG emissions in the City. The inventory also presents a benchmark for analyzing future changes in emissions.

The inventory found that community-wide activities within the jurisdictional boundary of Elk Grove emitted 737,838 metric tons of CO_{2e} in 2005. Transportation was the largest sector at 48 percent of the inventory total, representing emissions from on-road vehicle miles traveled. Residential energy use contributed approximately 31 percent of total emissions, including natural gas and electricity use within homes in the City of Elk Grove. Commercial and industrial energy use contributed approximately 14 percent of total emissions, followed by waste generated within Elk Grove (5 percent), agricultural off-road vehicles and activities (less than 1 percent), and water-related energy use (less than 1 percent) (City of Elk Grove 2013). A summary of the 2005 inventory is presented in **Table 3.3-4**.

TABLE 3.3-4
CITY OF ELK GROVE 2005 COMMUNITY-WIDE GHG INVENTORY—METRIC TONS PER YEAR

Sector	Metric Tons CO _{2e}	Percentage
Residential	229,841	31.15%
Commercial/Industrial	101,607	13.77%
Transportation	357,309	48.43%
Waste	39,791	5.39%
Water-Related	4,371	0.59%
Agriculture*	4,919	0.67%
Total	737,838	100.00%

Source: City of Elk Grove, 2013.

3.3.2 REGULATORY FRAMEWORK

FEDERAL

Federal Regulation and the Clean Air Act

In the past, the US Environmental Protection Agency (EPA) has not regulated GHGs under the Clean Air Act (CAA) because it asserted that the CAA did not authorize the EPA to issue mandatory regulations to address global climate change and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. However, the US Supreme Court held that the EPA must consider regulation of motor vehicle GHG emissions. In *Massachusetts v. Environmental Protection Agency et al.*, twelve states and cities, including California, together with several environmental organizations, sued to require the EPA to regulate GHGs as pollutants under the CAA (127 S. Ct. 1438 [2007]). The Court ruled that GHGs fit within the CAA's definition of a pollutant and that the EPA did not have a valid rationale for not regulating GHGs. In response to this ruling, the EPA has recently made an endangerment finding that GHGs pose a threat to the public health and welfare. This is the first step necessary for the establishment of federal GHG regulations under the CAA.

In April 2010, the EPA issued the final rule on new standards for GHG emissions and fuel economy for light-duty vehicles in model years 2017–2025. In November 2010, the EPA published the "PSD [Prevention of Significant Deterioration] and Title V Permitting Guidance for Greenhouse Gases," which provides the basic information that permit writers and applicants need to address GHG emissions regulated under the CAA. In that document, the EPA described the "Tailoring Rule" in the regulation of GHG emissions. With the Tailoring Rule, the EPA established a phased schedule in the regulation of stationary sources. The first phase of the Tailoring Rule began January 2, 2011, and focuses the GHG permitting programs on the largest sources with the most CAA permitting experience. In step two, which began June 1, 2011, the rule expands to cover large sources of GHGs that may not have been previously covered by the CAA for other pollutants. The rule also describes the EPA's commitment to future rulemaking that will describe subsequent steps of the Tailoring Rule for GHG permitting (EPA 2010c).

Federal Heavy-Duty National Program

In August 2011, the EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced the first-ever program to reduce GHGs emissions and improve fuel efficiency of heavy-duty trucks and buses. The EPA and the NHTSA have each adopted complementary standards under their respective authorities covering model years 2014–2018, which together form a comprehensive Heavy-Duty National Program. The goal of the joint rulemakings is to present coordinated federal standards that help manufacturers to build a single fleet of vehicles and engines that are able to comply with both. The EPA and the NHTSA have adopted standards for CO₂ emissions and fuel consumption, respectively, tailored to each of three main regulatory categories: (1) combination tractors; (2) heavy-duty pickup trucks and vans; and (3) vocational vehicles. The EPA has additionally adopted standards to control HFC leakage from air conditioning systems in pickups and vans and combination tractors. Also exclusive to the EPA program are the EPA's N₂O and CH₄ standards that will apply to all heavy-duty engines, pickups, and vans. For purposes of this program, the heavy-duty fleet incorporates all on-road vehicles rated at a gross vehicle weight at or above 8,500 pounds, and the engines that power them, except those covered by the current GHG emissions and Corporate Average Fuel Economy standards for model year 2012–2016 passenger vehicles.

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The Heavy-Duty National Program is projected to reduce fuel use and GHG emissions from medium- and heavy-duty vehicles, from semi trucks to the largest pickup trucks and vans, as well as all types and sizes of work trucks and buses in between. Vehicles covered by this program make up the transportation segment's second largest contributor to oil consumption and GHG emissions. This comprehensive program is designed to address the urgent and closely intertwined challenges of dependence on oil, energy security, and global climate change. The EPA and the NHTSA estimate that the combined standards will reduce CO₂ emissions by about 270 million metric tons and save about 530 million barrels of oil over the life of vehicles built for the 2014–2018 model years, providing \$49 billion in net program benefits. A second phase of regulations is planned for model years beyond 2018. The goals would include spurring innovation as well as updating the assessment of actual emissions and fuel use from this sector. Such future regulation would also be designed to align with similar programs developed outside the United States.

STATE

Assembly Bill 1493

Assembly Bill (AB) 1493 (Pavley) of 2002 (Health and Safety Code Sections 42823 and 43018.5) requires the California Air Resources Board (CARB) to develop and adopt the nation's first GHG emissions standards, also known as Pavley 1, for automobiles. The California legislature declared in AB 1493 that global warming is a matter of increasing concern for public health and the environment. It cites several risks that California faces from climate change, including a reduction in the State's water supply, an increase in air pollution caused by higher temperatures, harm to agriculture, an increase in wildfires, damage to the coastline, and economic losses caused by higher food, water, energy, and insurance prices. The bill also states that technological solutions to reduce GHG emissions would stimulate California's economy and provide jobs. In 2004, the State of California submitted a request for a waiver from federal clean air regulations, as the State is authorized to do under the CAA, to allow the State to require reduced tailpipe emissions of CO₂. In late 2007, the EPA denied California's waiver request and declined to promulgate adequate federal regulations limiting GHG emissions. In early 2008, the state brought suit against the EPA related to this denial.

In January 2009, President Obama instructed the EPA to reconsider the Bush Administration's denial of California's and 13 other states' requests to implement global warming pollution standards for cars and trucks. In June 2009, the EPA granted California's waiver request, enabling the state to enforce its GHG emissions standards for new motor vehicles beginning with the current model year. Also in 2009, President Obama announced a national policy aimed at both increasing fuel economy and reducing GHG pollution for all new cars and trucks sold in the United States. The new standards would cover model years 2012–2016 and would raise passenger vehicle fuel economy to a fleet average of 35.5 miles per gallon by 2016. When the national program takes effect, California has committed to allowing automakers showing compliance with the national program to also be deemed in compliance with state requirements. California is committed to further strengthening these standards, requiring a 45 percent GHG reduction from the 2020 model year vehicles.

AB 1493 will require carmakers to reduce GHG emissions from new passenger cars and light trucks beginning in 2011. Regulations were adopted by CARB. It is expected that new vehicles sold in California will result in an average of 16 percent less GHG emissions than current models. These standards were recently adopted by the US EPA and will become national standards through 2016. CARB will continue to coordinate with the US EPA and the Department of Transportation to develop fuel standards for 2017–2025 vehicle model years (CARB 2010c).

The State is also proposing to reduce the carbon intensity of transportation fuels consumed in California through a Low Carbon Fuel Standard (LCFS) being developed by CARB. Standards would reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 and 20 percent by 2035 as called for by Governor Schwarzenegger in Executive Order S.01.07. The LCFS will also incorporate compliance mechanisms that provide flexibility to fuel providers in how they meet the requirements to reduce greenhouse gas emissions. Although a federal district court judge ruled in late 2011 that California's Low Carbon Fuel Standard violates the dormant commerce clause by discriminating out of state ethanol products and that CARB failed to identify alternative methods for achieving greenhouse gas reductions, the ruling has been appealed by CARB, and CARB is proceeding with rulemaking development for LCFS implementation.

Executive Order S-3-05

Executive Order S-3-05 (State of California) proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emissions targets. Specifically, emissions are to be reduced to the 2000 level by 2010, to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary will also submit biannual reports to the governor and state legislature describing (1) progress made toward reaching the emission targets, (2) impacts of global warming on California's resources, and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of CalEPA created a Climate Action Team made up of members from various state agencies and commissions. The Climate Action Team released its first report in March 2006 and continues to release periodic reports on progress. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government, and community actions, as well as through state incentive and regulatory programs.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599) requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. The gases regulated by AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, nitrogen trifluoride, and sulfur hexafluoride. The reduction to 1990 levels will be accomplished through an enforceable statewide cap on GHG emissions that was phased in beginning in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that CARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap, institute a schedule to meet the emissions cap, and develop tracking, reporting, and enforcement mechanisms to ensure that the State achieves reductions in GHG emissions necessary to meet the cap. CARB is implementing this program. The CARB board adopted a draft resolution for formal cap-and-trade rulemaking on December 16,

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2010, and is developing offset protocols and compliance requirements. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

Climate Change Scoping Plan

In October 2008, CARB published its Climate Change Proposed Scoping Plan, which is the State's plan to achieve GHG reductions in California required by AB 32. The Scoping Plan contains the main strategies California will implement to achieve reduction of 169 million metric tons (MMT) of CO₂e, or approximately 30 percent from the State's projected 2020 emissions level of 596 MMT of CO₂e under a business-as-usual scenario (this is a reduction of 42 MMT CO₂e, or almost 10 percent, from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The largest proposed GHG reduction recommendations are from improving emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO₂e), implementation of the LCFS (15.0 MMT CO₂e), energy-efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO₂e), and a renewable portfolio standard for electricity production (21.3 MMT CO₂e). The Scoping Plan identifies the local equivalent of AB 32 targets as a 15 percent reduction below baseline GHG emissions level, with baseline interpreted as GHG emissions levels between 2003 and 2008. The Scoping Plan states that land use planning and urban growth decisions will play an important role in the State's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions. (Meanwhile, CARB is also developing an additional protocol for community emissions.) CARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emissions sectors. The Scoping Plan states that the ultimate GHG reduction assignment to local government operations is to be determined. With regard to land use planning, the Scoping Plan expects approximately 5.0 MMT CO₂e will be achieved associated with implementation of Senate Bill (SB) 375, which is discussed in further detail below. The Climate Change Proposed Scoping Plan was approved by CARB on December 11, 2008.

The status of the Scoping Plan had been uncertain as a result of a court decision in the case of *Association of Irrigated Residents v. California Air Resources Board* (San Francisco Superior Court Case No. CPF-09-509562). The court found that CARB, in its CEQA review, had not adequately explained why it selected a scoping plan that included a cap-and-trade program rather than an alternative plan. While CARB disagrees with the trial court finding and has appealed the decision, in order to remove any doubt about the matter and in keeping with CARB's interest in public participation and informed decision-making, CARB revisited the alternatives. The revised analysis includes the five alternatives included in the original environmental analysis: a "no project" alternative (that is, taking no action at all); a plan relying on a cap-and-trade program for the sectors included in a cap; a plan relying more on source-specific regulatory requirements with no cap-and-trade component; a plan relying on a carbon fee or tax; and a plan relying on a variety of proposed strategies and measures. The revised analysis relies on emissions projections updated in light of current economic forecasts, accounting for the economic downturn since 2008 and reduction measures already approved and put in place.

The public hearing to consider approval of the AB 32 Scoping Plan Functional Equivalent Document (including the Supplement) and the AB 32 Scoping Plan was held on August 24, 2011. On this date, the Scoping Plan was re-approved by the Board.

California Environmental Quality Act Guidelines Section 15183.5

The State of California has established GHG emissions reduction targets and has determined that GHG emissions, as they relate to global climate change, are a source of adverse environmental impacts in California that should be addressed under CEQA. Although AB 32 did not amend CEQA, it identifies the myriad environmental problems in California caused by global warming (Health and Safety Code Section 38501[a]). In response to the relative lack of guidance on addressing GHGs and climate change, SB 97 was passed in order to amend CEQA by directing the Office of Planning and Research to prepare revisions to the State CEQA Guidelines addressing the mitigation of GHG emissions or their consequences. These revisions to the State CEQA Guidelines went into effect in January 2010.

The revised CEQA Guidelines encourage the adoption of policies or programs as a means of comprehensively addressing the effects of projects on GHG emissions. Lead agencies may use adopted GHG emissions reduction plans to assess the cumulative impacts of discretionary projects on climate change. In addition, the Guidelines provide a mechanism to streamline development review of future projects. Specifically, lead agencies may use adopted plans consistent with State CEQA Guidelines Section 15183.5 to analyze and mitigate the significant effects of GHGs under CEQA at a programmatic level by adopting a plan for the reduction of GHG emissions. Later, as individual projects are proposed, project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review in their cumulative impacts analysis.

A GHG emissions reduction plan that allows for subsequent project-level streamlining must meet the standards identified in CEQA Guidelines Section 15183.5(b)(1):

- A. Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
- B. Establish a level, based on substantial evidence, below which the contribution of GHG emissions from activities covered by the plan would not be cumulatively considerable;
- C. Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- D. Specify measures or a group of measures, including performance standards that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- E. Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specific levels; and
- F. Be adopted in a public process following environmental review.

Senate Bill 1368

SB 1368 (codified at Public Utilities Code Chapter 3 of Division 4.1) is the companion bill of AB 32. SB 1368 required the California Public Utilities Commission to establish a GHG emissions performance standard for baseload generation from investor-owned utilities by February 1, 2007. The bill also required the California Energy Commission to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the GHG emissions rate from a baseload combined-cycle natural-gas-fired plant. The legislation further requires that

3.3 GREENHOUSE GASES AND CLIMATE CHANGE

all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the California Public Utilities Commission and the California Energy Commission.

Renewables Portfolio Standard (Senate Bill 1078, Senate Bill 107, and Senate Bill X1-2)

Established in 2002 under SB 1078, and accelerated in 2006 under SB 107 and again in 2011 under SBX1-2, California's Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. The 33 percent standard is consistent with the RPS goal established in the Scoping Plan. As interim measures, the RPS requires 20 percent of retail sales to be sourced from renewable energy by 2013, and 25 percent by 2016. Initially, the RPS provisions applied to investor-owned utilities, community choice aggregators, and electric service providers. SBX1-2 added, for the first time, publicly owned utilities such as the Sacramento Municipal Utility District (SMUD), to the entities subject to the RPS. However, publicly owned electric utilities, such as the SMUD are given flexibility in developing utility-specific targets, timelines, and resource eligibility rules. The expected growth in the RPS to meet the standards in effect in 2008 is not reflected in the BAU calculation in the AB 32 Scoping Plan, discussed above. In other words, the Scoping Plan's 2020 business as usual does not take credit for implementation of the RPS that occurred after its adoption.

Senate Bill 375

SB 375 (codified at Government Code and Public Resources Code¹), signed in September 2008, provides for a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 will be implemented over the next several years and includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development. SB 375 also requires Metropolitan Planning Organizations (MPOs) (such as the Sacramento Area Council of Governments (SACOG)) to incorporate a "sustainable communities strategy" (SCS) in their regional transportation plans (RTPs) that will achieve GHG emission reduction targets by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

SB 375 is similar to the Regional Blueprint Planning Program, established by the California Department of Transportation, which provides discretionary grants to fund regional transportation and land use plans voluntarily developed by MPOs working in cooperation with councils of governments. The Scoping Plan relies on the requirements of SB 375 to implement the carbon emissions reductions anticipated from land use decisions.

On September 23, 2010, CARB adopted regional targets for the reduction of greenhouse gases applying to the years 2020 and 2035 (CARB 2011b). For the area under the SACOG's jurisdiction, including the project area, CARB adopted regional targets for reduction of GHG emissions by 7 percent for 2020 and by 16 percent for 2035. On February 15, 2011, CARB's executive officer approved the final targets (CARB 2011c).

¹ Senate Bill 375 is codified at Government Code Sections 65080, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, 65588, 14522.1, 14522.2, and 65080.01 as well as Public Resources Code Sections 21061.3 and 21159.28 and Chapter 4.2.

SACOG's sustainable communities strategy is included in the 2035 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (SACOG 2012). The document was adopted by SACOG in April 2012. The policies and supportive strategies of the MTP/SCS that reduce vehicle miles traveled (VMT) focus on transportation and land use planning. The plan addresses the needs of the current population of 2.3 million residents, by increasing maintenance of existing roads and adding more sidewalks, bike lanes, and restoring, maintaining and expanding transit, making it possible for more people to live and work in the same community and live independently as they age. It also plans for roads and transit projects where new houses and jobs are added to serve today's children when they grow up as well as new residents anticipated to move here over the next few decades.

California Building Energy Efficiency Standards

Energy conservation standards for new residential and commercial buildings were originally adopted by the California Energy Resources Conservation and Development Commission in June 1977 and most recently revised in 2008 (Title 24, Part 6 of the California Code of Regulations (CCR)). In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24) was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations). Part 11 establishes voluntary standards on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. Some of these standards have become mandatory in the 2010 edition of the Part 11 code. Current mandatory standards include:

- Twenty (20) percent mandatory reduction in indoor water use, with voluntary goal standards for 30, 35, and 40 percent reductions
- Separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects
- Diversion of 50 percent of construction waste from landfills, increasing voluntarily to 65 and 75 percent for new homes and 80 percent for commercial projects
- Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies
- Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board

The California Energy Commission has opened a public process and rulemaking proceeding for the adoption of changes to the 2013 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code) and associated administrative regulations in Part 1 (collectively referred to here as the standards). The proposed amended standards will be adopted in 2014. The 2013 Building Energy Efficiency Standards are 25 percent more efficient than previous standards for residential construction and 30 percent better for nonresidential construction. The standards, which take effect on January 1, 2014, will offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

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Sacramento Metropolitan Air Quality Management District

The proposed Project is located in the Sacramento Valley Air Basin, which is under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). The SMAQMD offers the guidance contained in the *Guide to Air Quality Assessment in Sacramento County* (2011) for addressing the GHG emissions associated with land use development projects. However, the SMAQMD does not currently have an adopted threshold of significance for GHG emissions. The SMAQMD recommends addressing the potential impacts of project-generated GHG emissions, including: 1) a description of the existing environmental conditions or setting (see Existing Setting above), 2) a discussion of the existing regulatory environment pertaining to GHGs (see Regulatory Framework above), 3) a discussion of the GHG emissions sources associated with the proposed Project's construction and operational activities, and 4) a discussion of feasible construction and operational mitigation necessary to reduce impacts.

City of Elk Grove Climate Action Plan and Sustainability Element

Background

On March 27, 2013, the City of Elk Grove adopted a CAP and Sustainability Element of the General Plan. The Sustainability Element and CAP are two separate but related components of the City's sustainability strategy. The City is taking proactive steps to become a more environmentally sustainable community and respond to State requirements related to GHG emissions. The CAP is a culmination of existing and proposed initiatives to reduce GHG emissions through goals and measures related to transportation, land use, energy use, waste, and water use. The CAP is a tool for the City to achieve the State-recommended GHG emissions reduction target within the City of Elk Grove through new and existing land uses, transportation, and City codes and programs. Concurrently with the CAP, the City adopted a new Sustainability Element of the General Plan. The Sustainability Element is a long-term (20+ years) plan that organizes and highlights the City's goals related to sustainability and provides new direction and vision to maintain a healthy, balanced community. As an element of the City's General Plan, the Sustainability Element governs land use decisions. The Sustainability Element also creates an overarching framework for the City to achieve GHG emissions reductions.

The CAP functions as an implementation tool of the Sustainability Element, focusing specifically on strategies to reduce GHG emissions and providing direction to reduce emissions consistent with State recommendations. It also builds on the goals and vision of the Sustainability Element, but translates these goals into numeric estimates of GHG emissions reduction potential. While the CAP is not an adopted component of the General Plan, it is connected to the General Plan as an implementation item of the Sustainability Element in order to directly implement the goals and policies of the Sustainability Element.

CEQA Streamlining and the CAP

Responding to the State CEQA Guidelines identified above, lead agencies may use adopted GHG emissions reduction plans to assess the cumulative impacts of discretionary projects on climate change. In addition, the guidelines provide a mechanism to streamline development review of future projects. The City of Elk Grove CAP meets the criteria identified in CEQA Guidelines for a GHG reduction plan (see 15183.5(b)(1)), above.

3.3 GREENHOUSE GASES AND CLIMATE CHANGE

For developments wishing to benefit from CEQA streamlining provisions provided by the CAP, a project must demonstrate consistency with the CAP forecasts, measures applicable to the project, and demonstrate the project's incorporation of the measures. The City determined the GHG impacts of community-wide GHG emissions based on the AB 32 reduction target. The City identified the statewide AB 32 reduction target as the reduction of GHG emissions to 1990 levels by 2020, or as outlined in the AB 32 Scoping Plan, the functional equivalent of 15 percent below "existing" (2005–2008) levels by 2020. As discussed earlier, for the purpose of defining existing emissions levels, the City chose the emissions in the year 2005 as a benchmark for existing emissions conditions in the City (Elk Grove 2013). The Sustainability Element adopts the target of a 15 percent reduction below 2005 emissions by 2020, whereas the CAP provides the mitigations to achieve the reduction target.

The City's target is consistent with statewide efforts established in CARB's Climate Change Scoping Plan to reduce statewide GHG emissions to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. The CAP presents a 2020 target of 627,128 metric tons CO_{2e}. This community-wide emissions level identifies the level below which the contribution to community-wide GHG emissions from activities consistent with the General Plan and the CAP would not be cumulatively considerable under CEQA (City of Elk Grove 2013). As shown in Table 3.3-5, the CAP achieves a community-wide 15 percent reduction below baseline 2005 levels by 2020.

**TABLE 3.3-5
CLIMATE ACTION PLAN COMMUNITY-WIDE GHG REDUCTIONS—METRIC TONS PER YEAR***

Emissions Inventory	
2005 Baseline Emissions Inventory	737,838
2020 Unmitigated Emissions Inventory	1,017,499
Reductions from 2020 Unmitigated Emissions Inventory	
California State-Led Reductions	
SMUD Renewables Portfolio Standard	-102,452
CALGreen Building Standards (Buildings Energy Efficiency Standards)	-17,305
Clean Car Fuel Standard (AB 1493 Pavley Vehicle Standards)	-65,140
Low Carbon Fuel Standard	-29,642
Total State-Led Emissions Reductions	-214,539
Elk Grove Climate Action Plan Reductions	
An Innovative and Efficient Built Environment	-37,240
Resource Conservation	-28,221
Transportation Alternatives and Congestion Management	-108,221
Municipal Programs	-2,149
Total Climate Action Plan Emissions Reductions	-175,831
Combined CAP and State Reductions	390,371
AB 32 Emissions Target (15% below 2005 Baseline Inventory)	627,162
Elk Grove Climate Action Plan and State-Adjusted Inventory	627,128
AB 32 Target Achieved?	Yes

*Note: due to rounding, the total may not be the sum of component parts.
Source: City of Elk Grove 2013

3.3 GREENHOUSE GASES AND CLIMATE CHANGE

In March 2013, the City certified a Subsequent Environmental Impact Report (SEIR) for the Sustainability Element and CAP (City of Elk Grove 2013). The City prepared the SEIR for use as a tiering and streamlining document for GHG emissions as allowed under Section 15183.5 of the CEQA Guidelines. The SEIR allows the City to use the CAP to determine that a subsequent project's incremental contribution to GHG and climate change impacts is not cumulatively considerable if the project complies with the CAP.

According to the CEQA Guidelines, projects using an adopted GHG emissions reduction plan for streamlining 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" (Section 15183.5 (b)(2)).

3.3.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the application of the following CEQA Guidelines Appendix G Environmental Checklist. A GHG impact is considered significant if implementation of the Project will:

- 1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- 2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

To meet the GHG emissions targets of AB 32, California would need to generate less GHG emissions in the future than current levels. It is recognized, however, that for most projects there is no simple metric available to determine if a single project would substantially increase or decrease overall GHG emissions levels or conflict with the goals of AB 32. Moreover, emitting GHG emissions into the atmosphere is not itself an adverse environmental effect. It is the increased concentration of GHG emissions in the atmosphere resulting in global climate change and the associated consequences of climate change that result in adverse environmental effects (e.g., sea level rise, loss of snowpack, severe weather events). Although it is possible to generally estimate a project's incremental contribution of GHGs into the atmosphere, it is typically not possible to determine whether or how an individual project's relatively small incremental contribution might translate into physical effects on the environment. Given the complex interactions between various global and regional-scale physical, chemical, atmospheric, terrestrial, and aquatic systems that result in the physical expressions of global climate change, it is impossible to discern whether the presence or absence of GHGs emitted by the project would result in any altered conditions.

For purposes of this analysis, the Project is analyzed relative to the City's adopted CAP and Sustainability Element to determine the significance of GHG emissions and contribution to climate change. As identified in previous sections, the CAP identifies both community-wide emissions levels and levels of significance, providing streamlining for purposes of this analysis.

Additionally, the analysis assesses impacts by identifying applicable requirements in the CAP. While the CAP presents several requirements that are not otherwise binding and enforceable to the proposed Project, because such requirements have not yet been adopted as City code or policies, as outlined above, the CEQA Guidelines require that any environmental document relying on an adopted GHG emissions reduction plan must incorporate requirements from the

plan, and if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project.

METHODOLOGY

The proposed Project was compared to the CAP forecasts and standards, relying on the streamlining provisions afforded by the CAP. GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

PROJECT IMPACTS AND MITIGATION MEASURES

Consistency with AB 32, Sustainability Element, and Climate Action Plan (Standards of Significance 1 and 2)

Impact 3.3.1 The Sustainability Element and CAP identifies a level of GHG emissions below which activities consistent with the General Plan and the CAP would not be cumulatively considerable under CEQA. Implementation of the proposed Project is consistent with CAP forecasts and would incorporate standards in the CAP as mitigation measures. Therefore, based on consistency with the CAP, this impact is **less than cumulatively considerable**.

Consistency with CAP Forecasts

The proposed Project would include construction of approximately 27,430 square feet of commercial buildings, including a gas station, office building, car wash, restaurant, and associated infrastructure, including a sound wall, parking spaces, patios, and on-site signage. While the proposed Project would trigger an amendment to the General Plan, it would result in a less intense use that is nonetheless consistent with the growth assumptions of the City's adopted CAP. Based on current General Plan designations and zoning, current permitted uses include 28,662 square feet of a grocery store. Additionally, the Project site has the potential for 51 high-density residential units, assuming average zoning intensities. In comparison, the proposed Project would consist of a net reduction in nonresidential space to 27,430 square feet, and an elimination of allowable housing. The long-term operations of the proposed Project would produce 2,296 metric tons of CO₂e annually; total construction-generated GHG emissions were amortized over the estimated life (30 years) of the proposed Project (see Appendix C).

The CAP forecasts emissions using several indicators. Transportation forecasts rely on regional transportation plans. As presented in Section 3.5, the proposed Project is consistent with regional transportation plans and would not result in any new or significant traffic impact. Therefore, the Project is consistent with the traffic forecasts of the CAP. Additionally, the CAP forecasts several key GHG emissions sectors related to the intensity of site use: waste, residential energy, commercial/industrial energy, and water-related energy use. The currently allowed or permitted development intensity is consistent with the assumptions used in the CAP. As shown in **Table 3.3-6**, because the Project would not lead to an intensification of uses beyond those currently allowed under the Zoning Code and General Plan, the Project would not exceed the assumptions of the CAP forecast and is therefore consistent with the CAP forecast.

3.3 GREENHOUSE GASES AND CLIMATE CHANGE

**TABLE 3.3-6
COMPARISON OF PROPOSED PROJECT TO CURRENT**

	Currently Allowed or Permitted	Proposed Project	Net Change from Existing Zoning (C = B-A)	Would Net Effect of Project Exceed Currently Allowable or Permitted Uses?	Relevant CAP Emissions Sector
Residents¹	158	0	-158	No	Waste
Nonresidential Square Feet	28,662	27,430	-1,232	No	Commercial/Industrial Energy, Water-Related
Dwelling Units	51	0	-51	No	Residential Energy, Water-Related

Notes:

1. Assumes average of 3.1 persons per dwelling unit, based on the average household size presented in the Housing Element (City of Elk Grove 2009, Table 1-13)

Consistency with CAP Community-Wide Standards

As previously mentioned, for the City to achieve consistency with AB 32, future emissions will need to be reduced community-wide 15 percent below 2005 emissions by 2020 (to 627,162 metric tons CO₂e). The CAP identifies the reduction measures that the City will implement community-wide to achieve this level of reduction. Measures in the CAP identify Project-level standards that the City will encourage or require through the plan review process.

Based on the streamlining provided by the CEQA Guidelines, as summarized above, the proposed Project is using the findings of the adopted CAP and certified Final SEIR (City of Elk Grove 2013) to evaluate the impact on GHG emissions and climate change. By incorporating the applicable Project-level standards identified in the CAP as mitigation measures, the proposed Project is therefore consistent with the CAP and would not result in a new significant cumulative impact related to GHG emissions.

In addition to applicable CAP standards, the proposed Project would also be required to comply with City of Elk Grove Municipal Code Chapter 23.54, Landscaping, which establishes the minimum amount of trees that must be planted to enhance the appearance of developments. This requirement, while addressing aesthetics, also reduces GHG emissions, as there are energy and GHG-reducing benefits from increased shading on buildings and pavements. Increased shading results in lower urban temperatures, thus reducing the urban heat island effect. Other co-benefits of Municipal Code Chapter 23.54 include carbon sequestration. Employees and patrons of the proposed Project would also have access to a nearby transit stop that serves three existing bus lines, and a continuous sidewalk would be constructed on the eastern side of East Stockton Boulevard along the frontage of the proposed Project site.

If the Project does not implement CAP mitigations, this would be a *potentially significant impact*. This Project would be required to implement existing City codes and policies, in addition to the applicable mitigations of the CAP that are identified below. While there is no new or substantially more severe significant impact from the proposed Project, consistent with the City's CAP and provisions of the CEQA Guidelines, this Project will be required to implement the following mitigations from the CAP to demonstrate a **less than significant impact**.

Mitigation Measures

MM 3.3.1

Prior to building permit approval, the City of Elk Grove Planning Department shall require that the Project applicant implement the following measures to reduce emissions of GHGs associated with the proposed Project, based on the referenced measures from the City's CAP and City of Elk Grove Municipal Code:

- All buildings constructed shall achieve Tier 1 of Title 24, Part 1 green building standards to exceed minimum Title 24 energy efficiency standards by 15 percent, consistent with CAP Measure BE-6.
- The proposed Project shall provide rewiring or conduit for solar photovoltaic (PV) in each proposed building, consistent with CAP Measure BE-10. The intent of rewiring for solar PV systems is to reduce barriers to later installation of on-site solar PVs. The proposed Project may also satisfy the intent of this mitigation by installing on-site solar PV systems.
- The Project shall provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas, consistent with CAP measure RC-1. Composting of a limited amount of food waste that may be generated as a byproduct of on-site food preparation shall be completed by agreement with a waste hauler. Cooking oils shall be directed off-site for reuse.
- All parking lots for shopping centers or office developments constructed as part of the proposed Project shall include designated carpool parking spaces near store entries, implementing CAP Measure TACM-3.
- The Project applicant shall provide bicycle parking at a ratio of one bicycle parking space per 20 vehicle parking spaces, consistent with CAP Measure TACM-5. Provision of additional bicycle support facilities such as lockers and shower facilities, consistent with voluntary CAP Measure TACM-5, may qualify the applicant for eligibility to request a reduction in the minimum number of parking spaces required, pursuant to Elk Grove Municipal Code Sections 23.58.060 and 23.16.037.
- During the design review process, the applicant shall demonstrate compliance with CAP Measure TACM-5 by showing an analysis of office and mixed-use building connections and orientation to pedestrian paths, bicycle paths, and existing transit stops within a half mile of the Project site. As feasible, all such Project components shall orient Project toward an existing transit, bicycle, or pedestrian corridor with minimum setbacks, or support equivalent pedestrian, bicycle, or alternative transportation through other methods.

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- The proposed Project shall minimize setbacks from the street, provide pedestrian pathways, and use design features for entrances and parking lots to encourage pedestrian access and safety between transit facilities, consistent with CAP Measure TACM-5.
- Indoor water conservation measures shall be incorporated, such as use of low-flow toilets, urinals, and faucets.
- The Project shall ensure that low-water-use landscaping (i.e., drought-tolerant plants and drip irrigation) is installed. At least 75 percent of all landscaping plants shall be drought-tolerant as determined by a licensed landscape architect or contractor and in conformance with Chapters 14.10 and 23.54 of the Elk Grove Municipal Code.

Timing/Implementation: Prior to final design, building permit issuance

Enforcement/Monitoring: City of Elk Grove Planning Department

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3.4 NOISE

This section describes the existing noise environment in the vicinity of the Project site and identifies potential noise impacts associated with the proposed 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. This section is based on a review of the information provided in the Environmental Noise Assessment prepared for the proposed Project by J.C. Brennan & Associates Inc. in March 2012, and Sheldon Road/State Route 99 GPA and Rezone Environmental Impact Report (Elk Grove 2009).

This section addresses the Project's contribution to the surrounding noise environment. Since previous analysis in the Sheldon/99 GPA Rezone Project EIR was based on the assumption that the Project site would be developed as high density residential, this analysis looks at the possible noise effects of the newly proposed uses, most notably noise from drive-through speakers. This section addresses NOP comments regarding the differences in noise levels between what was previously approved and the currently proposed uses, as well as the effectiveness of proposed soundwalls adjacent to residential uses in mitigating Project noise impacts.

3.4.1 EXISTING SETTING

ACOUSTIC FUNDAMENTALS

For a summary of acoustic fundamentals please refer to the Environmental Noise Assessment prepared for the proposed Project by J.C. Brennan & Associates Inc. in March 2012, which is included in **Appendix D** of this EIR.

EXISTING NOISE ENVIRONMENT

The existing noise environment in the Project area is defined primarily by the local roadway network, including State Route 99 located approximately a quarter mile west of the Project site, East Stockton Boulevard adjacent to the west side of the Project site, and Sheldon Road adjacent to the south side of the Project site.

Existing Sensitive Noise Receptors

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise-sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. In the vicinity of the Project site, sensitive land uses include existing residential uses along the east side of the Project site. Additionally, the vacant parcel located immediately north of the Project site is zoned for Medium Density Residential (MDR) development; however, no development proposals have been submitted for this parcel.

Noise Effect on People

The effects of noise can result in: annoyance, nuisance, and dissatisfaction; interference with activities such as speech, sleep, and learning; and physiological effects such as hearing loss or sudden startling. In general, the more that noise levels increase over the existing ambient noise

3.4 NOISE

level, the less acceptable the new noise source will be to receptors. With regard to increases in A-weighted noise level, the following relationships occur:

- A 1 decibel (dBA) increase cannot be perceived.
- A 3 dBA increase is considered a just-perceivable difference.
- A 5 dBA increase is required before any noticeable change in human response would be expected.
- A 10 dBA increase is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Existing Ambient Noise Levels

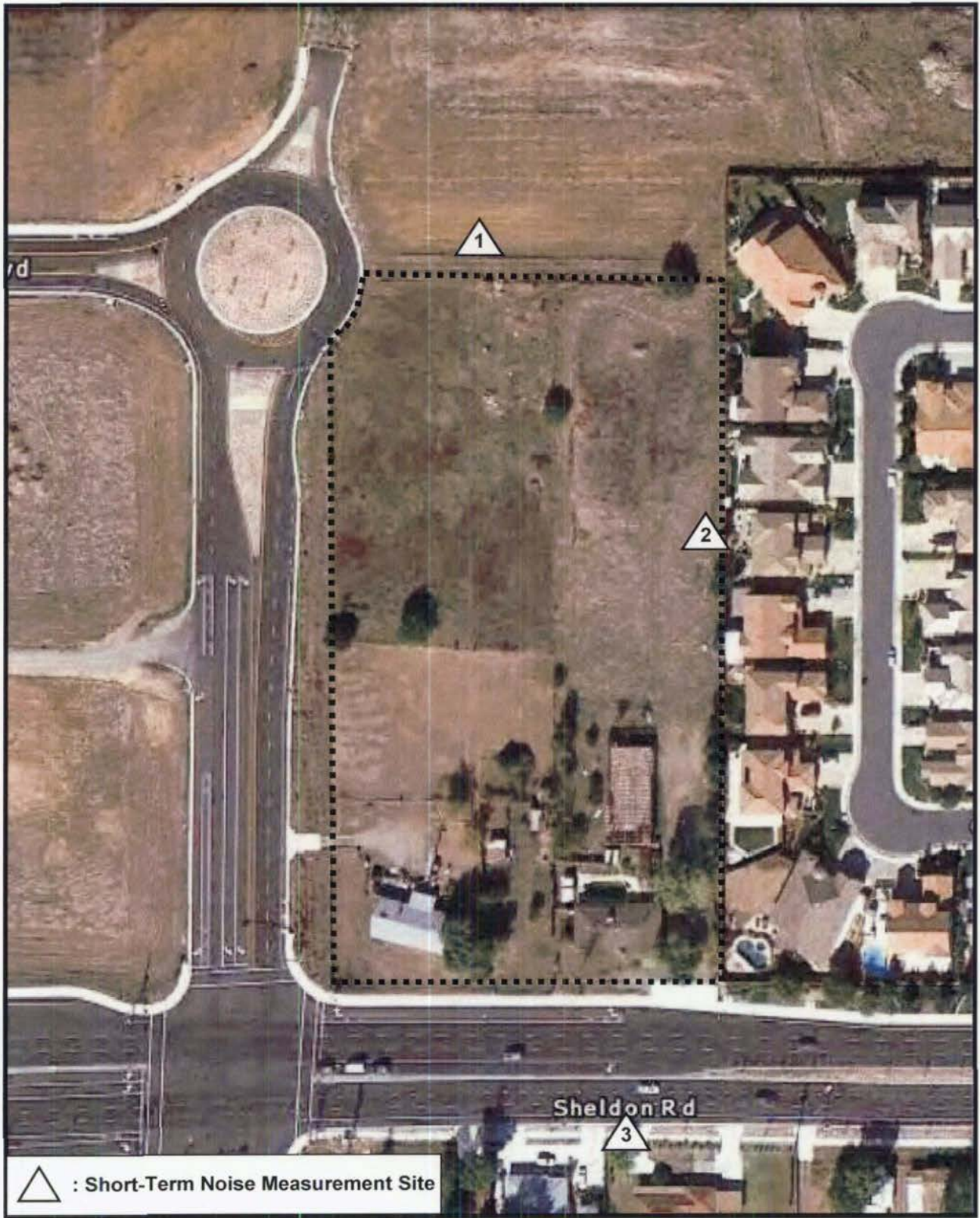
To quantify the existing ambient noise environment in the Project vicinity, J.C. Brennan & Associates, Inc. conducted short-term noise level measurements at three locations on the Project site during the early morning, daytime, and nighttime periods (Brennan 2012). A summary of the existing ambient noise level measured is provided in **Table 3.4-1** and noise measurement locations are shown on **Figure 3.4-1**.

**TABLE 3.4-1
EXISTING TRAFFIC NOISE LEVELS**

Measurement Characteristics		Average Measured Hourly Noise Levels (dB)		
Location	Time	Leq	L50	Lmax
Daytime Measurements (7am–10pm)				
ST-1	9:35 AM	55	53	71
	8:33 PM	51	51	59
ST-2	9:47 AM	53	53	56
	8:19 PM	55	54	60
ST-3	10:01 AM	64	62	71
	8:07 PM	64	61	76
Nighttime Measurements (10pm–7am)				
ST-1	6:32 AM	50	50	53
ST-2	6:19 AM	53	53	56
ST-3	6:07 AM	65	61	75

Notes: Daytime measurements were taken on January 26, 2012, and nighttime measurements were taken on January 30, 2012.

Source: J.C. Brennan & Associates 2012.



Source: J.C. Brennan & Associates, 2012

3.4.2 REGULATORY FRAMEWORK

LOCAL

City of Elk Grove General Plan Noise Element

The Noise Element of the City of Elk Grove General Plan contains policies designed to protect the community from the harmful and annoying effects of exposure to excessive noise. General Plan policies applicable to the proposed Project include:

"Policy NO-1: New development of the uses listed in Table 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."

"Policy NO-4: Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table NO-A at existing or planned noise-sensitive land uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the Project design. The requirements for the content of an acoustical analysis are shown in Table NO-B."

"Policy NO-8: Where noise mitigation measures are required to achieve the standards of Tables NO-A and NO-C, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures, including the use of distance from noise sources, have been integrated into the project."

"Policy NO-9: Where soundwalls or noise barriers are constructed, the City shall strongly encourage and may require the use of a combination of berms and walls to reduce the apparent height of the wall and produce a more aesthetically appealing streetscape."

3.4 NOISE

The Noise Element of the City of Elk Grove General Plan establishes noise level criteria for both transportation noise sources and for non-transportation (stationary) noise sources. Noise compatibility of proposed development is determined in comparison to these standards. The City's noise standards for Projects affected by stationary (i.e., non-transportation) and transportation noise sources are summarized below.

Transportation Noise Source Criteria

For transportation noise sources, a land use compatibility standard of 60 dB L_{dn} (day/night average) is used within outdoor activity areas of residential land uses. In addition, an interior noise level standard of 45 dB L_{dn} is applied to all residential uses (Table NO-C of the Noise Element and Section 6.32.090 of the Elk Grove Municipal Code). Where the noise levels in outdoor activity areas cannot be reduced to 60 dB L_{dn} or less using 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 the interior noise levels are in compliance with the 45 dB L_{dn} standard (Section 6.32.090 of the Elk Grove Municipal Code).

Stationary Noise Sources Criteria

Stationary noise sources have a maximum acceptable exterior noise standard of 55 dBA L_{eq} during the daytime hours (i.e., 7:00AM to 10:00PM) and 45 dBA during the nighttime hours (i.e., 10:00PM to 7:00AM) for residential land uses (Table NO-A of the Noise Element and Section 6.32.080 of the Elk Grove Municipal Code). This standard is reduced by 5 dB for stationary noise sources that have tonal, impulsive, or repetitive noise characteristics.

City of Elk Grove Municipal Code Chapter 6.32 – Noise Control

The City of Elk Grove noise control ordinance (codified in Chapter 6.32 of the Municipal Code) regulates noise generated by non-transportation sources. Section 6.32.100.E of the Municipal Code exempts construction noise providing the 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 Saturday; Saturdays 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. Section 6.32.140.A restricts construction activities between the hours of 7:00 p.m. and 7:00 a.m. that have the potential to create a noise disturbance across a residential property line, except for emergency work of public service utilities. Section 6.32.140.B restricts loading and unloading activities (including opening, closing, or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects) on private property between the hours of 10:00PM and 7:00AM.

City of Elk Grove Zoning Code

The City of Elk Grove Zoning Code (Municipal Code Title 23) includes certain performance standards that could have the effect of reducing noise levels. For example, Section 23.52.070(D) requires that a minimum 6-foot tall masonry wall be provided along the exterior property lines for all industrial and commercial Projects when located adjacent to residential (and other specified) zones, and that where a sound wall is required, a masonry wall of up to 8 feet in height may be provided. Section 23.58.110(c) of the Zoning Code requires that no truck entrance door, loading zone, and/or dock serving commercial vehicles be permitted to face a residential area within 500 feet.

Groundborne Vibration

There are no federal, state, or local regulatory standards for groundborne vibration. However, various criteria have been established to assist in the evaluation of vibration impacts. For instance, the California Department of Transportation (Caltrans) has developed vibration criteria based on potential structural damage risks and human annoyance. Caltrans-recommended criteria for the evaluation of groundborne vibration levels, with regard to structural damage and human annoyance, are summarized in **Table 3.4-2** and **Table 3.4-3**, respectively. The criteria differentiate between transient and continuous/frequent sources. Transient sources of groundborne vibration include intermittent events, such as blasting, whereas continuous and frequent events would include the operations of equipment, including construction equipment, and vehicle traffic on roadways (Caltrans 2002, 2004).

The groundborne vibration criteria recommended by Caltrans for evaluation of potential structural damage is based on building classifications, which take into account the age and condition of the building. For residential structures and newer buildings, Caltrans considers a minimum peak-particle velocity (ppv) threshold of 0.25 inches per second (in/sec) for transient sources and 0.04 in/sec for continuous/frequent sources to be sufficient to protect against building damage. Continuous groundborne vibration levels below approximately 0.02 in/sec ppv are unlikely to cause damage to any structure. In terms of human annoyance, continuous vibrations in excess of 0.04 in/sec ppv and transient sources in excess of 0.25 in/sec ppv are identified by Caltrans as the minimum perceptible level for ground vibration. Short periods of ground vibration in excess of 2.0 in/sec ppv can be expected to result in severe annoyance to people. Short periods of ground vibration in excess of 0.1 in/sec ppv (0.2 in/sec ppv within buildings) can be expected to result in increased levels of annoyance (Caltrans 2002, 2004).

TABLE 3.4-2
DAMAGE POTENTIAL TO BUILDINGS AT VARIOUS GROUND BORNE VIBRATION LEVELS

Structure and Condition	Vibration Level (in/sec ppv)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely Fragile Historic Buildings, Ruins, Ancient Monuments	0.12	0.08
Fragile Buildings	0.2	0.1
Historic and Some Old Buildings	0.5	0.25
Older Residential Structures	0.5	0.3
New Residential Structures	1.0	0.5
Modern Industrial/Commercial Buildings	2.0	0.5

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2004

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**TABLE 3.4-3
ANNOYANCE POTENTIAL TO PEOPLE AT VARIOUS GROUND BORNE VIBRATION LEVELS**

Human Response	Vibration Level (in/sec ppv)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.10
Severe	2.0	0.4

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2004

3.4.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Criteria for determining the significance of noise impacts were developed based on information contained in CEQA Guidelines, Appendix G. According to those guidelines, a Project may have a significant effect on the environment if it would result in the following conditions:

- 1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies.
- 2) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- 3) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.
- 4) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.
- 5) For a Project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, would the Project expose people residing or working in the Project area to excessive noise levels.
- 6) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels.

As discussed in the Notice of Preparation/Initial Study (NOP/IS; Appendix B), the proposed Project would not result in any new or substantially more severe impacts related to short-term construction-generated noise levels, which would be reduced to less than significant with implementation of mitigation adopted in the Sheldon/99 GPA and Rezone EIR. In addition, the Project site is not located within 2 miles of a public airport or public use airport a private airstrip. Therefore, this is not addressed in the EIR (Standards of Significance 5 and 6).

Exposure of specific land uses to significant traffic noise or stationary noise sources is based on the criteria established in the Noise Element of the City of Elk Grove General Plan (Elk Grove 2009). For purposes of this analysis, significant increases in the traffic noise levels were based on Federal Interagency Committee on Noise (FICON)-recommended criterion. Accordingly, significant increases in ambient noise levels would be defined as an increase of 5 dBA, or greater, where the ambient noise environment is less than 60 dBA; 3.0 dBA, or greater, where the ambient noise environment is between 60 and 65 dBA; and an increase of 1.5 dBA, or greater, where the ambient noise environment exceeds 65 dBA. The rationale for these criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a Project is sufficient to cause significant annoyance (FICON 2000).

METHODOLOGY

This section is based on a review of the information provided in the *Environmental Noise Assessment* prepared for the proposed Project by J.C. Brennan & Associates Inc. in March 2012, which is included in **Appendix D** of this EIR.

J.C. Brennan & Associates conducted early morning, daytime, and nighttime ambient noise level measurements for the Project at three different locations. At the noise measurement site north of the Project site, due to proximity to the freeway, ambient noise levels were constantly measured to exceed 50 dBA L_{eq} . According to the City of Elk Grove General Plan Noise Element, Table NO-A Part 2, the City may "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." The City's regular nighttime noise level standard is 45 dBA L_{eq} . However, with application of a -5 dB penalty for noise consisting of speech, this standard would be lowered to 40 dBA L_{eq} , which would be 10 dBA lower than measured ambient noise levels. Therefore, J.C. Brennan & Associates recommended an increase of 5 dBA to the nighttime noise level standard for the Project, to a level of 50 dBA L_{eq} , equal to existing ambient noise levels. After application of the -5 dB penalty for noise consisting of speech, the recommended standard is 45 dBA L_{eq} . This standard is still 5 dBA less than existing measured ambient noise levels. This methodology is well supported by industry standards and City policy.

J.C. Brennan & Associates calculated property line noise levels for truck circulation at a distance of 20 feet, the distance measured from the centerline of travel. For evaluating the effectiveness of a noise barrier, J.C. Brennan & Associates conservatively assumed that the receptor could be located as far as 20 feet from the sound wall. However, no additional sound propagation attenuation was added for this extra distance. Therefore, the analysis below represents noise levels at the property line. While a sensitive receptor could be located much closer to the sound wall than 20 feet, the noise barrier performance would increase, because the receptor is closer to the wall, making the barrier more effective, and overall noise levels would be less than assumed in the analysis.

Short-term and long-term stationary-source noise impacts associated with future development were analyzed based on typical noise sources and corresponding noise levels commonly associated with the proposed land uses. Stationary-source noise levels at nearby land uses were calculated assuming an average noise attenuation rate of 6 dB per doubling of distance from the source. Predicted noise levels were compared to the City's applicable noise standards for determination of impact significance.

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Ambient Noise Level Measurements

Sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value (L_{max}) is the highest noise level measured. The average value (L_{eq}) is the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value (L_{50}) is the sound level exceeded 50 percent of the time during the monitoring period.

A Larson Davis Laboratories (LDL) Model 824 precision integrating sound level meter was calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the ambient noise measurements (Brennan 2012).

Traffic Noise Levels

Traffic noise levels were calculated using the Federal Highway Administration (FHWA) roadway noise prediction model (FHWA-RD-77-108) based on California vehicle reference noise levels and traffic data obtained from the traffic analysis prepared for this Project. Additional input data included day/night percentages of autos, medium and heavy trucks, vehicle speeds, ground attenuation factors, and roadway widths. Predicted noise levels were calculated at a distance of 50 feet from the near-travel-lane centerline, as well as distances to the predicted 60 and 65 dBA community noise equivalent level (CNEL) noise contours.

Operational Noise Levels

To predict operational noise levels (L_{eq}) generated by truck pass-by trips, delivery activities, car wash, vacuum station, parking lot, gas fueling station, and drive-through operations, the following formula was used:

$$L_{eq} = SEL + 10 \cdot \log (N_{eq}) - 35.6$$

Where, SEL = mean sound exposure level; $10 \cdot \log (N_{eq})$ = 10 times the logarithm of the number of truck arrivals and departures during an hour; and 35.6 is 10 times the logarithm of the number of seconds in an hour.

For truck circulation, the noise assessment assumed that the proposed Project could result in a total of two truck passages along the northern or eastern Project boundaries during the peak hour of delivery operations, which could enter or exit the Project site from either East Stockton Boulevard or Sheldon Road, and the SEL for a truck arrival and departure for tractor trailer trucks would be 81 at a distance of 50 feet. For delivery noise, it was assumed that would be four events per hour, and the SEL would be 76 dB at a distance of 50 feet. For car wash noise, it was assumed that there would be 20 events per hour and the SEL would be 91 dB at a distance of 50 feet and 90 degrees off-axis from the car wash exit. Vacuum stations were estimated based on five four-minute cycles (20 minutes per hour) and have a SEL of 72 dB at a distance of 10 feet. Parking lot door opening and closing noise was based on 286 events per hour and a SEL of 71 dB at a distance of 50 feet. Parking lot traffic noise was based on 188 events per hour and a SEL of 58 dB at a distance of 50 feet. Gas fueling noise was estimated based on 191 vehicles arriving during the AM peak hour (between 10:00PM and 7:00AM) and a SEL of 71 dB at a distance of 50 feet. Drive-through lane speaker noise was estimated based on a SEL of 60 to 70 dB at a distance of 5 feet from the vehicle. Maximum drive-through speaker noise levels at the residential property lines were estimated to be 68 dB L_{max} at a distance of 20 feet (3 dB were added to the 65 dB due to the proposed two units at this location). Average noise levels were predicted to be approximately 5 dB less than maximum levels during a busy hour. Note that

these noise levels are not the levels that would be experienced at neighboring properties, as they do not take into consideration the noise attenuation from soundwalls.

Mechanical Equipment Noise

The noise assessment evaluated rooftop mechanical equipment noise levels using the Cadna A sound prediction model (version 4.1.137). Inputs to the model included typical sound power levels for packaged heating, ventilation, and air conditioning (HVAC) units, building and ground elevations, and building parapets. It was assumed that each use would have one to two packaged units ranging in tonnage from five to six tons and a sound power of 82 dB (ARI Standard 270-95).

Noise Control Measures

For noise levels predicted to exceed the applicable City exterior noise level standards, an analysis of existing and potential noise reduction measures was conducted to determine what was necessary to ensure compliance with noise standards. Any measures determined to be necessary are provided as mitigation measures in the following impact analysis.

Vibration

Short-term and long-term groundborne vibration impacts were qualitatively discussed based on vibration levels commonly associated with stationary and mobile sources and impact criterion derived from existing environmental documentation.

PROJECT IMPACTS AND MITIGATION MEASURES

Increases in Long-term Traffic Noise (Standard of Significance 3)

Impact 3.4.1 Implementation of the proposed Project would not result in significant increases in traffic noise levels. **The proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

The Sheldon/99 GPA and Rezone EIR determined that the increases in traffic noise levels due to the Sheldon/99 GPA and Rezone would be less than significant. Implementation of the proposed land uses would result in increased traffic volumes on some area roadways. The increase in traffic volumes resulting from implementation of the proposed Project would, therefore, contribute to predicted increases in traffic noise levels.

Based on predicted traffic volumes obtained from the traffic analysis prepared for Sheldon/99 GPA and Rezone EIR, modeling was conducted for roadways anticipated to be primarily affected by future development in the area, which included the Project site. The Sheldon/99 GPA and Rezone EIR predicted traffic noise increase generated by the 23,231 weekday trips would range from 0.13 to 0.91 dB CNEL (see page 4.6-18 of the Sheldon/99 GPA Rezone Project EIR). As discussed in Section 2.0 Project Description, based on existing land use designations for the two parcels that make up the Project site, up to 51 residential units and approximately 28,000 square feet of commercial could be developed. Because the Project proposes development of 27,430 square feet of commercial development, which is substantially less development than could currently be developed on the Project site, the proposed Project would result in less noise than the development under current land use designations. In approving the Sheldon/99 GPA Rezone Project, the City Council determined noise impacts with the development of up to 51

3.4 NOISE

residential units and 28,000 square feet of commercial on the Project site would be less than significant. Because the proposed Project proposes no residential units and less commercial square footage than the previously approved Project, the less-than-significant conclusion from the previously approved Project also applies to the proposed Project.

Therefore, the traffic noise levels generated by buildout of the proposed Project would be within the noise levels of the approved land uses. Since the ambient noise levels would not exceed traffic noise generated by approved land uses, the trips generated by the proposed Project would **not substantially increase the impact from what was previously disclosed** in the Sheldon/99 GPA and Rezone EIR.

Mitigation Measure

None required.

Exposure of Sensitive Receptors to or Generation of Excessive Operational Noise Levels (Standards of Significance 1 and 3)

Impact 3.4.2 Exposure to noise levels generated by future on-site stationary sources associated with the proposed Project could exceed the City's noise standards at noise-sensitive land uses. This impact would be **potentially significant**.

The Sheldon/99 GPA and Rezone EIR determined that noise generated by commercial uses could affect sensitive receptors, which was a potentially significant impact. Sheldon/99 GPA and Rezone EIR mitigation measure MM 4.6.3 requires an acoustical analysis with attenuation measures acceptable to the City that are sufficient to achieve compliance with City noise standards in order to reduce the impact to less than significant.

The proposed Project would result in development that would generate noise during various operational activities on the Project site. Operational activities that would generate noise would include truck circulation, delivery activities, car wash, vacuum stations, gas fueling, drive-through speakers, parking lot activities, and mechanical equipment on the buildings (e.g., rooftop HVAC units). These operational noise sources are described below.

Operational Equipment

The proposed uses will include HVAC equipment and refrigeration and freezer units. Based on similar Projects, it is anticipated that mechanical equipment would consist primarily of rooftop-mounted packaged HVAC units and ventilation fans. Mechanical units will be relatively evenly distributed across the rooftops. Rooftop HVAC units typically stand about 4 to 5 feet tall. Each packaged unit would generate 82 dB of noise (Brennan 2012).

According to the Environmental Noise Assessment, the 45 dB L_{eq} noise level contour would be contained to the Project site. Noise levels generated by the HVAC equipment on the Project site would result in noise levels of 41 dB L_{eq} or less at the closest residential uses (Brennan 2012).

Operational Activities

Truck Circulation. Tractor-trailer deliveries could regularly occur for much of the proposed retail buildings on the Project site. It is expected that the deliveries could occur during the nighttime or early morning hours. Some deliveries would occur at the north side of the Project site, adjacent to the proposed coffee shop drive-through lane. Trucks may enter or exit the Project site from

either East Stockton Boulevard or Sheldon Road. The SEL for a truck arrival and departure for tractor trailer trucks is 81 dB at a distance of 50 feet (Brennan 2012). The nearest sensitive receptors are residential land uses located approximately 20 feet from the noise source.

Delivery Noise. Noise generated from vendor deliveries would be relatively brief and generally consist of doors opening and closing, use of a hand truck, removal of merchandise, and movement of personnel. The SEL for delivery vendors is 76 dB at a distance of 50 feet (Brennan 2012). The vendor delivery areas are located approximately 35 feet from the nearest property.

Car Wash. Air blower dryers associated with car washes are considered to be the dominant source of noise for that operation; therefore, the car wash noise levels were based on the sound levels of the proposed dryer system. The proposed car wash tunnel would include the use of approximately 13 MacNeil Tech 21 fixed nozzle blowers or "producers." The SEL for air blowers is 91 dB at a distance of 50 feet and 90 degrees off-axis from the car wash exit (Brennan 2012).

Vacuum Stations. The SEL for vacuum stations is 72 dB at a distance of 10 feet (Brennan 2012). The Project proposes a total of 14 vacuum units located north and west of the proposed car wash tunnel. Four of the vacuum units would be located within approximately 85 feet of the east residential property line. An additional 10 units would be located approximately 215 feet or more from the east residential property line.

Parking Lot. Parking lot noise would be generated by automobile arrivals/departures, including car doors slamming and people conversing. The SEL for parking lot traffic noise is 58 at a distance of 50 feet and for a typical car door opening and closing is 71 at a distance of 50 feet (Brennan 2012).

Gas Fueling Stations. Gas fueling noise includes vehicles stopping and starting and some conversation. The typical SEL for gas fueling activity is approximately 71 dB at a distance of 50 feet (Brennan 2012).

Drive-Through Lanes. Two proposed drive-through facilities are proposed on the Project site. The drive-through speakers would be the primary source of noise generated by these operational sources of noise. Drive-through lane speaker noise is based on a SEL of 60 to 70 dB at a distance of 5 feet from the vehicle (Brennan 2012). The proposed drive-through lane speakers would be located approximately 40 feet from the nearest residential property line to the north and 200 feet from the nearest residential property line to the east.

The noise levels predicted to be generated by each of the above operational activities are summarized in **Table 3.4-4**. Noise barriers analyzed include the existing 6 to 8 foot tall CMU wall at the east property line and an 8 foot tall soundwall at the north property line.

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**TABLE 3.4-4
PREDICTED PROJECT OPERATIONAL NOISE LEVELS**

Operational Source	City of Elk Grove General Plan Noise Level Standard (dB Leq)		Predicted Operational Noise Levels (dB Leq)			
	Daytime	Nighttime ¹	East Property Line Receptors		North Property Line Receptors	
			Daytime	Nighttime	Daytime	Nighttime
Truck Circulation	55	45	54	54	54	54
Vendor Delivery	55	45	45	45	50	50
Car Wash	55	N/A	58	Closed	55	Closed
Vacuum Stations	55	N/A	56	Closed	50	Closed
Gas Station	55	45	47	47	38	38
Starbucks Drive-Through	50	45	41	41	54	54
McDonald's Drive-Through	50	45	43	43	39	39
South Parking Lot	55	45	44	44	39	39
North Parking Lot	55	45	50	50	49	49

Notes: **Bold** values exceed standard.

1. Ambient noise levels were constantly measured to exceed 50 dBA Leq noise measurement site ST- 1. The City of Elk Grove General Plan Noise Element, Table NO-A Part 2, allows the City to "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." The City's regular nighttime noise level standard is 45 dBA Leq. However, with application of a -5 dB penalty for noise consisting of speech, this standard would be lowered to 40 dBA Leq, 10 dBA lower than measured ambient noise levels. Therefore, j.c. Brennan & Associates, Inc. recommended a nighttime standard of 45 dBA Leq, which is still 5 dBA less than existing measured ambient noise levels.

Source: Brennan 2012; Brennan 2013a

As summarized in **Table 3.4-4**, operational noise levels would exceed the City's noise level standards at sensitive receptors located east and north of the Project site. Car wash and vacuum stations occurring during the daytime hours and truck circulation, gas station, and north parking lot activities occurring during the nighttime hours would affect sensitive receptors located east of the Project site. Sensitive receptors located north of the Project site would be exposed to excessive operational noise generated by Starbucks drive-through lane activities occurring during the daytime hours, and truck circulation, vendor delivery, Starbucks drive-through lane, and north parking lot activities occurring during nighttime hours. These operation activities that would exceed the City's noise standards are discussed in detail below.

Truck Circulation. Truck circulation activities on the Project site would generate an hourly equivalent sound level of 48 dB Leq at a distance of 50 feet, which would result in a noise level of 54 dB during the nighttime hours at the sensitive receptors located north and east of the Project site. This would exceed the residential land use exterior noise standard of 45 dBA during the nighttime hours (i.e., 10:00PM to 7:00AM).

Vendor Deliveries. Vendor deliver activities on the Project site would generate an hourly equivalent sound level of 48 dB Leq at a distance of 50 feet, which would result in a noise level of 50 dB during the nighttime hours at the sensitive receptors located north of the Project site. This would exceed the residential land use exterior noise standard of 45 dBA during the nighttime hours (i.e., 10:00PM to 7:00AM).

Car Wash Noise. It was estimated that on a busy hour, there would be 20 car wash events, which would generate an hourly equivalent sound level of 86 dB L_{eq} at a distance of 50 feet, 90 degrees off-axis from the car wash exit. This would result in a noise level of 58 dB during the daytime hours at the sensitive receptors located east of the Project site. This would exceed the residential land use exterior noise standard of 55 dBA during the daytime hours (i.e., 7:00AM to 10:00PM).

Vacuum Stations. Based on 14 vacuums operating for five four-minute cycles (20 minutes or 1,200 seconds) of operation in a busy hour, noise levels of 56 dB would result during the daytime hours at the sensitive receptors located east of the Project site. This would exceed the residential land use exterior noise standard of 55 dBA during the daytime hours (i.e., 7:00AM to 10:00PM).

Gas Fueling Station. The fueling canopy would result in an AM peak-hour L_{eq} of approximately 58 dB L_{eq} at a distance of 50 feet, which would result in noise levels of 47 dB during the nighttime hours at the sensitive receptors located north of the Project site. This would exceed the residential land use exterior noise standard of 45 dBA during the nighttime hours (i.e., 10:00PM to 7:00AM).

Drive-Through. The coffee shop drive-through speakers on the Project site would generate an hourly equivalent sound level of 60 dB L_{eq} at a distance of 20 feet, which would result in noise level of 54 dB during the daytime and nighttime hours at the sensitive receptors located north of the Project site. This would exceed the residential land use exterior noise standard of 50 dBA during the daytime hours and 45 dBA during the nighttime hours.

Parking Lot. Parking lot activities at the north parking lot (coffee shop, retail A, pizza restaurant) on the Project site would generate a peak-hour noise level of approximately 60 dB L_{eq} at a distance of 50 feet, which would result in a noise level of 50 dB and 49 dB during the nighttime hours at the sensitive receptors located east and north, respectively, of the Project site. This would exceed the residential land use exterior noise standard of 45 dBA during the nighttime hours.

As summarized in **Table 3.4-4** and discussed above, the proposed Project is predicted to generate noise levels exceeding the applicable City exterior noise level standards. The Environmental Noise Assessment included an analysis of existing and necessary noise reduction measures to achieve compliance with the applicable noise level standards.

Existing Noise Barriers

There is an existing concrete block noise barrier, ranging in height between 6 feet (north end) and 8 feet (south end) currently installed along the east property line of the Project site. According to the Environmental Noise Assessment, the existing noise barrier along the east Project property line is predicted to reduce the noise levels generated by the proposed Project to comply with the City's daytime and nighttime exterior noise level standards as summarized in **Table 3.4-5**.

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**TABLE 3.4-5
PROJECT OPERATIONAL NOISE LEVELS WITH NOISE BARRIER**

Operational Source	City of Elk Grove General Plan (dB Leq) Noise Level Standard		Predicted Operational Noise Levels (dB Leq) with Existing Noise Barrier			
	Daytime	Nighttime	East Property Line Receptors		North Property Line Receptors	
			Daytime	Nighttime	Daytime	Nighttime
Truck Circulation	55	45	49	49	47	49
Vendor Delivery	55	45	40	40	43	40
Car Wash	55	N/A	36	36	45	36
Vacuum Stations	55	N/A	38	38	31	38
Gas Station	55	45	53	Closed	47	Closed
Starbucks Drive-Through	50	45	50	Closed	42	Closed
McDonald's Drive-Through	50	45	40	40	30	40
South Parking Lot	55	45	39	39	31	39
North Parking Lot	55	45	44	44	41	44

Notes: **Bold** values exceed standard.

Source: Brennan 2012

As shown in **Table 3.4-5**, truck circulation activities would generate noise levels of 49 dB during the nighttime hours at sensitive receptors located east and north of the Project site, which would exceed the residential land use exterior noise level standard of 45 dB Leq for nighttime. This would be considered a **potentially significant impact**. However, mitigation provided below would reduce this impact to a less than significant level.

Mitigation Measure

MM 3.4.2 The following noise reduction methods shall be incorporated into the Project design to reduce noise levels and achieve compliance with the City's exterior noise level limits.

- An 8-foot-tall sound wall, constructed with rough, split-face concrete block, shall be constructed along the north property line of the Project site.
- Loading and delivery activities which require the use of semi-trucks shall be limited to daytime (7:00AM to 10:00PM) hours.
- Individual vacuums shall be limited to a maximum sound level of 72 dBA at a distance of 10 feet.
- Car wash and vacuum stations shall be limited to daytime (7:00AM to 10:00PM) hours only.
- Rooftop mechanical equipment shall be shielded from view by building parapets and/or rooftop mechanical screen barriers.

- The City Planning Department will confirm these measures are incorporated into the design prior to issuance of building permits.

Restriction of truck deliveries to daytime hours is a common mitigation. Implementation of the above mitigation measure would prohibit on-site deliveries that require the use of semi-trucks during nighttime hours (10:00PM to 7:00AM). Prohibiting nighttime deliveries would ensure that the Project would not exceed City's exterior nighttime noise level standards. Therefore, the proposed Project complies with Sheldon/99 GPA and Rezone EIR mitigation measure MM 4.6.3 by providing an acoustical analysis, which contains measures to reduce noise levels to City noise standards. Therefore, the impacts associated with operational noise generated by the proposed Project would be reduced to a less than significant level, so the **proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

Exposure of Sensitive Receptors to Groundborne Vibration (Standards of Significance 2 and 4)

Impact 3.4.3 Exposure to groundborne vibration levels would not exceed applicable standards at nearby existing or proposed land uses. **The proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

The Sheldon/99 GPA and Rezone EIR determined that impacts related to groundborne vibration would be less than significant (Impact 4.6.5, page 4.6-22). However, exposure to groundborne vibration levels could potentially occur in association with short-term construction and long-term operation of the proposed land uses. Therefore, impacts associated with exposure of sensitive receptors to short-term groundborne vibration and long-term exposure to groundborne vibration levels are discussed separately.

Short-term Exposure to Groundborne Vibration

Construction activities associated with future development would likely require the use of various tractors, trucks, and jackhammers. The use of major groundborne vibration-generating construction equipment/processes (i.e., blasting, pile driving) is not anticipated to be required for construction of future on-site residential and commercial uses. Groundborne vibration levels commonly associated with construction equipment are summarized in **Table 3.4-6**.

**TABLE 3.4-6
REPRESENTATIVE VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT**

Equipment	Peak Particle Velocity (ppv) at 25 Feet (In/Sec)
Large Bulldozers	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozers	0.003

Source: FTA 2006; Caltrans 2004

3.4 NOISE

Based on the vibration levels presented in **Table 3.4-6**, ground vibration generated by construction equipment would not exceed approximately 0.09 in/sec ppv at 25 feet. Predicted vibration levels at the nearest off-site structures would not be anticipated to exceed the minimum recommended criteria for structural damage (0.2 in/sec ppv as shown in **Table 3.4-2**) and human annoyance (0.1 in/sec ppv as shown in **Table 3.4-3**) at nearby land uses. Therefore, short-term groundborne vibration impacts would be considered a **less than significant impact**. This conclusion is consistent with the Sheldon/99 GPA and Rezone EIR (see Impact 3.6.5), which identified this impact as less than significant (Elk Grove 2009).

Long-term Exposure to Groundborne Vibration

No major stationary sources of groundborne vibration were identified in the Project area that would result in the long-term exposure of proposed on-site land uses to unacceptable levels of ground vibration. The nearest potential source of groundborne vibration would be heavy-duty vehicle trips on State Route 99, which is located approximately 600 feet west of the Project site. Heavy-duty trucks can result in detectable levels of groundborne vibration within approximately 50 feet of major roadways, but have not been shown to result in levels that would exceed corresponding thresholds for structural damage and human annoyance (0.2 and 0.1 in/sec ppv, respectively), at this same distance. Based on the highest measured traffic-generated vibration data compiled by Caltrans, predicted on-site groundborne vibration levels associated with vehicle traffic on State Route 99 would be approximately 0.01 in/sec ppv, or less (Caltrans 2002). Predicted on-site groundborne vibration levels associated with heavy-duty vehicle traffic at the nearest on-site land uses would not exceed corresponding thresholds for structural damage and human annoyance of 0.2 and 0.1 in/sec ppv, respectively. In addition, the proposed Project would not be anticipated to involve the use of any equipment or processes that would result in potentially significant levels of ground vibration that would exceed these standards. The Project's impact would be less than significant, so the **proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact**.

Mitigation Measure

None required.

3.4.4 CUMULATIVE SETTING AND IMPACTS

CUMULATIVE SETTING

The geographic extent of the cumulative setting for noise consists of the Project area and the surrounding areas within the City. Cumulative development conditions would result in increased cumulative roadway noise levels, and would also result in increased noise associated with future development. As noted earlier in this report, ambient noise levels in the Project area are influenced primarily by traffic noise emanating from area roadways. Future traffic data was provided from the Traffic Impact Analysis (TIA) prepared for the proposed Project in October 2012 by Fehr and Peers. No major stationary sources of noise have been identified in the Project area. The primary factor for cumulative noise impact analysis is the consideration of future traffic noise levels.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Contribution to Cumulative Noise Levels (Standards of Significance 1 and 3)

Impact 3.4.4 Implementation of the proposed Project would not result in a significant contribution to cumulative noise levels at nearby land uses. This is a **less than cumulatively considerable** impact.

The Sheldon/99 GPA and Rezone EIR found that the contribution to cumulative noise levels would be less than considerable. Future cumulative traffic noise levels were calculated using the FHWA roadway noise prediction model (FHWA-RD-77-108) in the Sheldon/SR 99 Rezone and GPA EIR. The Sheldon/SR 99 Rezone and GPA EIR predicted the increase in cumulative traffic noise would range from 0.08 to 0.36 dB CNEL. The proposed Project would decrease the number of weekday trips estimated to be generated on the Project site, compared to development potential on the Project site under existing land use designations. Predicted cumulative traffic noise levels and predicted increases in traffic noise levels attributable to the proposed Project are summarized in **Table 3.4-7**. The proposed Project would not contribute to significant increases in traffic noise levels along affected area roadways. Therefore, the Project's contribution to cumulative noise levels would be considered **less than cumulatively considerable**.

Mitigation Measure

None required.

**TABLE 3.4-7
PREDICTED CUMULATIVE TRAFFIC NOISE LEVELS**

Roadway Segment	CNEL (dBA) at 50 feet from Near-Travel-Lane Centerline			
	Cumulative	Cumulative Plus Project	Predicted Increase	Significant?
Elk Grove-Florin Road, Calvine Road to Bond Road	69.87	70.19	0.32	No
Sheldon Road, Center Parkway to West Stockton Boulevard	70.00	70.60	0.60	No
Sheldon Road, Elk Grove-Florin Road to Bradshaw Road	68.53	68.81	0.28	No
Bruceville Road, Sheldon Road to Laguna Boulevard	71.43	71.76	0.33	No
Sheldon Road, East Stockton Boulevard to Elk Grove-Florin Road	70.01	70.48	0.47	No
Bruceville Road, Jacinto Road to Sheldon Road	69.54	69.89	0.35	No

Traffic noise levels were predicted using the FHWA Traffic Noise Model based on data obtained from the traffic analysis prepared for this Project.

Source: Elk Grove 2009; Brennan 2013b.

3.4 NOISE

REFERENCES

- California Department of Transportation (Caltrans). 2002. *Transportation Related Earthborne Vibrations*.
- . 2004. *Transportation and Construction-Induced Vibration Guidance Manual*.
- Elk Grove, City of. 2009. *City of Elk Grove General Plan*. Adopted November 2003; amended through July 22, 2009. Elk Grove, CA.
- . 2009. *Sheldon/99 GPA and Rezone Environmental Impact Report* (SCH No. 2007122045). February 2009. Elk Grove, CA.
- FICON (Federal Interagency Committee on Noise). 2000. *Discussion of Methodologies of Measuring Noise Impact*.
- FTA (United States Department of Transportation, Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment*.
- J.C. Brennan & Associates, Inc. 2012. *Environmental Noise Assessment, Moore Sheldon Development Project*.
- . 2013a. *Response to Comments on the Moore Sheldon Noise Study*.
- . 2013b. *Personal communication May 20, 2013*.

3.5 TRAFFIC AND CIRCULATION

This section evaluates traffic impacts associated with the implementation of the Project. The study area for traffic impacts includes a set of roadway segments and intersections that may be affected by the resulting changes in traffic patterns. The analysis examines the transportation system surrounding the Project site under the following scenarios: Existing Conditions; Existing Plus Project Conditions; Cumulative No Project Conditions; and Cumulative Plus Project Conditions. The analysis in this section is based on the traffic study prepared by Fehr & Peers in October 2012, which is included as **Appendix E** of this EIR.

This section addresses the Project's traffic impacts and addresses comments on the NOP regarding the Project's effects on the State Highway System and adjacent roadway network. This section also analyzes the suggested study locations listed in one of the NOP comments letters.

3.5.1 EXISTING SETTING

CIRCULATION SYSTEM

Study Area

The roadway network study area was based on the expected travel characteristics (i.e., Project location and amount of Project trips) of the Project, as well as the susceptibility of nearby transportation facilities to Project impacts. The following four intersections, two roadway segments, and eleven freeway facilities were selected for analysis:

Study Intersections

1. Sheldon Road/State Route 99 (SR 99) Southbound Ramps/W. Stockton Boulevard
2. Sheldon Road/SR 99 Northbound Ramps
3. Sheldon Road/East Stockton Boulevard
4. Sheldon Road/Power Inn Road

Study Roadway Segments

1. Sheldon Road – between SR 99 and East Stockton Boulevard
2. Sheldon Road – between East Stockton Boulevard and Power Inn Road

Study Freeway Facilities (SR-99)

1. SR 99 Northbound – Slip On-ramp from Bond Road/Laguna Boulevard
2. SR 99 Northbound – Off-ramp to Sheldon Road
3. SR 99 Northbound – Loop On-ramp from Sheldon Road
4. SR 99 Northbound – Slip On-ramp from Sheldon Road
5. SR 99 Northbound – between Sheldon Road and Calvine Road

3.5 TRAFFIC AND CIRCULATION

6. SR 99 Northbound – Off-ramp to Calvine Road
7. SR 99 Southbound – On-ramp from Calvine Road
8. SR 99 Southbound – between Calvine Road and Sheldon Road
9. SR 99 Southbound – Off-ramp to Sheldon Road
10. SR 99 Southbound – On-ramp from Sheldon Road
11. SR 99 Southbound – Off-ramp to Bond Road/Laguna Boulevard

Key Roadway Facilities

Regional access to the Project site is provided by SR 99, located approximately a quarter mile west of the Project site. Several key local roadway facilities in the vicinity of the Project site, as well as SR 99, are described below.

State Route 99 is a north-south freeway located approximately a quarter mile west of the East Stockton Boulevard/Sheldon Road intersection. SR 99 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 from the Project site is provided via the interchange between SR 99 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.

Sheldon Road is an east-west arterial roadway that borders the southern property line of the Project site. Sheldon Road begins approximately 5.5 miles east of SR 99 and extends just less than 1 mile west of the freeway before transitioning into Center Parkway. Adjacent to the Project site, Sheldon Road carries approximately 25,500 vehicles a day in six travel lanes (three in each direction). The volume of the roadway increases west of East Stockton Boulevard to approximately 33,500 vehicles a day approaching the SR 99 interchange.

East Stockton Boulevard is a north-south roadway that travels along the eastern side of SR 99 and serves as a freeway frontage road, although interchange improvement Projects along SR 99 in Elk Grove have resulted in the realignment of East Stockton Boulevard at several points. East Stockton Boulevard begins at Grant Line Road, near the southern City limits of Elk Grove. The roadway continues northward into the City of Sacramento, where it transitions to Stockton Boulevard. Adjacent to the Project site, East Stockton Boulevard has two travel lanes in each direction.

Power Inn Road is a north-south arterial roadway that begins in the City of Sacramento at Folsom Boulevard and continues southward to Sheldon Road in the City of Elk Grove. North of Folsom Boulevard, Power Inn Road transitions into Howe Avenue, which has an interchange with US Highway 50. South of Sheldon Road, Power Inn Road transitions into Garrity Drive, a local roadway that provides access to residential development. Within the study area, Power Inn Road has a posted speed limit of 35 miles per hour and two travel lanes in each direction.

Transit Facilities

Transit service within the study area is provided by e-Tran, which operates nine local routes within the City and nine commuter routes with service to downtown Sacramento. One neighborhood route and two commuter routes provide service to a stop located on East Stockton Boulevard across Sheldon Road from the Project site. These routes are described briefly below:

- **Neighborhood Route 160 (Bond)** is a neighborhood route that connects Cosumnes River College to the southeastern City limits via Sheldon Road, East Stockton Boulevard, Bond Road, and Bradshaw Road. Existing service currently is provided Monday through Friday from approximately 6:30AM to 7:00PM on one hour headways except during midday service when two hour headways are provided.
- **Commuter Route 59 (Old Town Elk Grove Express)** is a commuter route that travels between the intersection of Elk Grove Florin Road/East Stockton Boulevard and downtown Sacramento. Within the study area, the route utilizes East Stockton Boulevard and Sheldon Road. Existing service currently includes three inbound buses in the morning, and three outbound buses in the evening Monday through Friday.
- **Commuter Route 60 (Elk Grove Park and Ride Express)** is a commuter route that travels between the intersection of East Stockton Boulevard/Elkmont Way and downtown Sacramento. The route travels north-south on East Stockton Boulevard. Existing service currently includes seven inbound buses in the morning, and five outbound buses in the evening Monday through Friday.

Bicycle and Pedestrian Facilities

Class II bicycle lanes (on-street with signage and striping) are provided in both directions on all major roadways within the study area, including Sheldon Road, East Stockton Boulevard, and Power Inn Road. Sidewalks are also provided on both sides of all roadways within the study area with one exception: East Stockton Boulevard lacks sidewalk coverage north of Sheldon Road adjacent to the Project site. Marked crosswalks are provided at all signalized intersections within the study area. During the collection of traffic counts, low levels of pedestrian activity were observed, with no more than seven pedestrians using any crosswalk during the two study peak hours.

EXISTING ROADWAY OPERATIONS

Intersection Operations

Figure 3.5-1 shows the peak hour traffic volumes, lane configurations, and traffic controls for each of the study intersections under Existing conditions. **Table 3.5-1** summarizes the existing peak hour intersection operations at the study intersections. All study intersections currently operate at acceptable levels of service (LOS) D or better during both peak hours.

3.5 TRAFFIC AND CIRCULATION

**TABLE 3.5-1
INTERSECTION LEVEL OF SERVICE—EXISTING CONDITIONS**

Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
		Delay (Seconds)	LOS	Delay (Seconds)	LOS
1. Sheldon Road/SR 99 Southbound Ramps	Signal	28	C	29	C
2. Sheldon Road/SR 99 Northbound Ramps	Signal	14	B	13	B
3. Sheldon Road/East Stockton Boulevard	Signal	24	C	22	C
4. Sheldon Road/Power Inn Road	Signal	43	D	26	C

Note: Delay is in seconds per hour. Intersection delay is based on the average intersection control delay for signalized intersections.

Source: Fehr & Peers 2012

Roadway Segment Operations

Table 3.5-2 summarizes the existing roadway operations at the study roadway segments. Sheldon Road operates at acceptable LOS within the study area. Sheldon Road operates at LOS B between SR-99 and East Stockton Boulevard and LOS A between East Stockton Boulevard and Power Inn Road.

**TABLE 3.5-2
ROADWAY SEGMENT LEVEL OF SERVICE—EXISTING CONDITIONS**

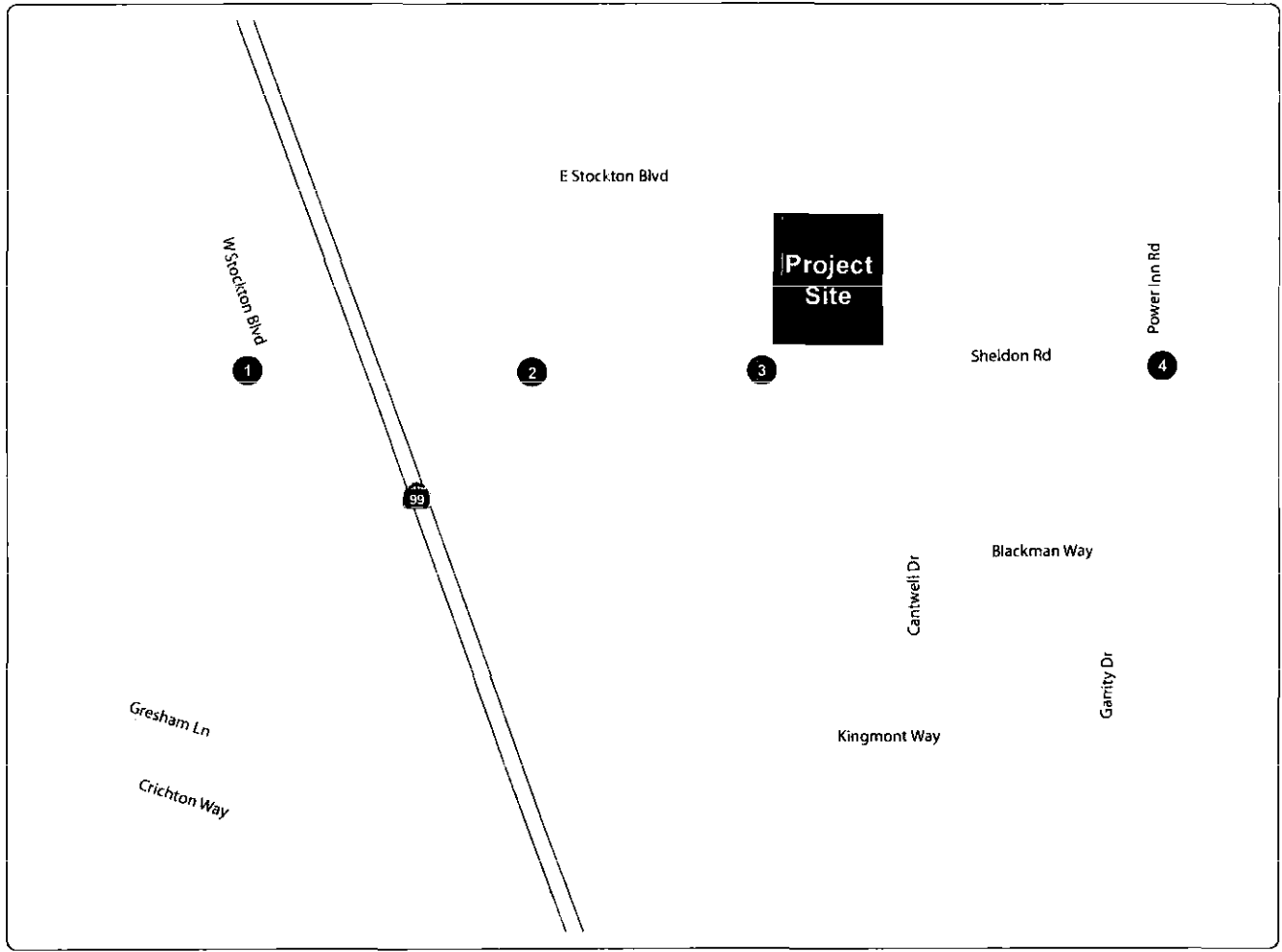
Sheldon Road between	Daily Capacity ⁽¹⁾	Average Daily Trips	V/C Ratio	LOS ⁽²⁾
1. SR 99 Northbound Ramps to East Stockton Boulevard	54,000	33,500	0.62	B
2. East Stockton Boulevard and Power Inn Road	54,000	25,500	0.47	A

Note: ⁽¹⁾ Capacity of each roadway is based on the number of lanes and the facility type. ⁽²⁾ Level of service (LOS) is based on the City of Elk Grove Traffic Impact Analysis Guidelines (July 2000).

Source: Fehr & Peers 2012

Freeway Facility Operations

Table 3.5-3 summarizes various existing traffic operations at each of the study freeway facilities. Several freeway segments operate at deficient levels of service under existing conditions.



1. Sheldon Rd/SR 99 SB Ramps	2. Sheldon Rd/SR 99 NB Ramps	3. Sheldon Rd/E Stockton Blvd	4. Sheldon Rd/Garity Dr/Power Inn Rd
<p>Sheldon Rd</p> <p>SR 99 SB Ramps</p> <p>W Stockton Blvd</p> <p>AM (PM)</p> <p>17 (27) 28 (51) 109 (85)</p> <p>166 (106) 791 (1,150) 252 (241)</p> <p>9 (23) 1,258 (951) 110 (165)</p> <p>178 (434) 11 (27) 136 (332)</p>	<p>Sheldon Rd</p> <p>SR 99 NB Ramps</p> <p>AM (PM)</p> <p>629 (233) 1,209 (1,497)</p> <p>1,082 (1,064) 421 (284)</p> <p>76 (200) 131 (260)</p>	<p>Sheldon Rd</p> <p>E Stockton Blvd</p> <p>AM (PM)</p> <p>147 (265) 25 (113) 5 (14)</p> <p>30 (8) 1,482 (1,145) 72 (113)</p> <p>176 (82) 986 (1,104) 51 (138)</p> <p>133 (120) 117 (52) 96 (135)</p>	<p>Sheldon Rd</p> <p>Garity Dr</p> <p>Power Inn Rd</p> <p>AM (PM)</p> <p>504 (317) 31 (12) 135 (178)</p> <p>236 (98) 1,062 (938) 5 (19)</p> <p>429 (322) 610 (916) 48 (15)</p> <p>18 (11) 100 (19) 13 (5)</p>

LEGEND

- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- 1** Study Intersection
- Traffic Signal

Source: Fehr & Peers, 2012



FIGURE 3.5-1
Existing Traffic

**TABLE 3.5-3
 FREEWAY LEVEL OF SERVICE—EXISTING CONDITIONS**

State Route 99	Control	AM Peak Hour		PM Peak Hour	
		Density	LOS	Density	LOS
1. Northbound—Bond Road/Laguna Boulevard Slip On-ramp	Merge/Diverge Overlap Area ⁽¹⁾	26	C	29	D
2. Northbound—Sheldon Road Off-ramp		30	D	34	D
3. Northbound—Sheldon Road Loop On-ramp	Merge Movement	27	C	27	C
4. Northbound—Sheldon Road Slip On-ramp	Merge Movement	31	D	28	C
5. Northbound between Sheldon Road and Calvine Road	Basic Freeway Segment	35	E	29	D
6. Northbound—Calvine Road Off-ramp	Diverge Movement	39	E	35	D
7. Southbound—Calvine Road On-ramp	Merge Movement	26	C	35	D
8. Southbound between Calvine Road and Sheldon Road	Basic Freeway Segment	25	C	38	E
9. Southbound—Sheldon Road Off-ramp	Diverge Movement	6	A	16	B
10. Southbound—Sheldon Road On-ramp	Weaving Area ⁽²⁾	—	C	—	D
11. Southbound—Bond Road/Laguna Boulevard Off-ramp					

Notes: **Bold** text indicates unacceptable operations. Density is the number of passenger cars per mile per lane. ⁽¹⁾For segments that consist of merge/diverge overlap areas, segment operation is the worst operating condition among the merge and diverge movement. ⁽²⁾The Leisch Method does not compute density.

Source: Fehr & Peers 2012

As shown in **Table 3.5-3**, the SR 99 northbound diverge at Calvine Road currently operates at LOS E during the AM peak hour. All other segments operate acceptably at LOS D or better during the AM peak hour. The southbound weaving section between the Sheldon Road and Bond Road/Laguna Boulevard interchanges is reported at LOS D during the PM peak hour; however, it operates close to the LOS D/LOS E threshold.

3.5 TRAFFIC AND CIRCULATION

3.5.2 REGULATORY FRAMEWORK

STATE

California Department of Transportation

The California Department of Transportation (Caltrans) operates and maintains SR 99 and Interstate 5 (I-5), which provide regional access to the City and the adjacent areas. Additionally, the Caltrans Division of Planning has four major functions: the Office of Advance Planning, Regional Planning/Metropolitan Planning Organization, Local Assistance/IGR/CEQA, and System Planning Public Transportation.

LOCAL

Sacramento Area Council of Governments

Sacramento Area Council of Governments (SACOG) is the metropolitan planning organization responsible for developing the State and federally required Metropolitan Transportation Plan (MTP). Every four years, in coordination with the 22 cities and six counties in the greater Sacramento region, the MTP is updated. The 2035 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) is a long-range plan for transportation in the region built on the Sacramento Regional Blueprint. The MTP/SCS was adopted April 19, 2012.

City of Elk Grove General Plan Circulation Element

The Circulation Element provides City policies for all types of transportation in Elk Grove: vehicles (auto and truck), light and heavy rail, public transit, bicycling, pedestrian, and air. The Circulation Element includes master plans for roadways, bicycle transit, and other transit modes, and defines the level of service (or level of congestion) which the City will seek to maintain on roadways. It also addresses congestion management requirements pursuant to Government Code Section 65088 et seq.

City of Elk Grove Transportation Improvement Plan

The City's Transportation Improvement Plan represents a five-year transportation capital improvement plan for the City. The Transportation Improvement Plan 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 Transportation Improvement Plan period. The improvements include but are not limited to street extensions, traffic signals, bikeway improvements, ramp widening, and bridge replacements. A variety of funding sources are used to implement the plan, including Measure A sales taxes, development fees, road funds, financing districts, federal programs, and state programs.

3.5.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following State CEQA Guidelines Appendix G. According to those guidelines, a Project may have a significant effect on the environment if implementation of the Project will:

- 1) Conflict with an applicable plan, ordinance, 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.
- 2) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- 3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- 4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- 5) Result in inadequate emergency access.
- 6) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

As discussed in the Notice of Preparation/Initial Study (NOP/IS; Appendix B), the Project would not result in any new or substantially more severe impacts related to impacts on air traffic patterns, increased hazards due to design features or incompatible uses, or policies, plans, or programs regarding public transit bicycle or pedestrian facilities.

Consistent with the City's *Traffic Impact Analysis Guidelines* (2000), the following evaluation criteria were used to determine the significance of the Project's impacts.

Intersections

An impact to an intersection is considered significant, and mitigation measures must be identified when:

- The traffic generated by the Project degrades the LOS from an acceptable LOS E or better (without the Project) to an unacceptable LOS F (with the Project).
- The LOS (without Project) is unacceptable and Project-generated traffic increases the average vehicle delay by more than five seconds.

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 E or better (without the Project) to an unacceptable LOS F (with the Project).
- The LOS (without Project) is unacceptable and Project-generated traffic increases the volume-to-capacity (V/C) ratio by 0.05 or more.

3.5 TRAFFIC AND CIRCULATION

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 would be (under cumulative conditions) 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 or more.
- Increases the number of peak-hour vehicles on a freeway mainline segment or freeway ramp junction by more than 5 percent.

According to the *Guide for the Preparation of Traffic Impact Studies* (Caltrans 2002), 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.

Bicycle/Pedestrian Facilities

An impact is considered significant if implementation of the Project will disrupt or interfere with existing or planned bicycle or pedestrian facilities.

Transit Facilities

An impact is considered significant if implementation of the Project will disrupt or interfere with existing or planned transit operations or transit facilities.

METHODOLOGY

This analysis is based on the *Traffic Study for East Stockton Boulevard/Sheldon Road* prepared by Fehr & Peers in October 2012 (Fehr & Peers 2012). In addition, the Sheldon/99 GPA and Rezone EIR prepared in 2009 is referenced accordingly (Elk Grove 2009). However, this section is a new analysis of traffic impacts in the Project area.

Data Collection

Vehicle and pedestrian counts were collected by Fehr & Peers at the four study intersections on Wednesday, January 25, 2012. The intersection turning movement counts were conducted during the morning (7:00AM to 9:00AM) and evening (4:00PM to 6:00PM) peak periods. For the majority of study intersections, the counts indicate that the AM peak hour is between 7:15AM and 8:15AM and the PM peak hour is between 4:55PM and 5:55PM.

In addition to the intersection counts, the following additional data sources were used in the analysis of study facilities: freeway traffic count data provided by Caltrans and available through the Caltrans Performance Measurement System; daily roadway segment traffic count data on Sheldon Road provided by the City; and traffic signal timings provided by the City.

Trip Generation and Distribution

The *Trip Generation Handbook, 8th Edition* prepared by the Institute of Transportation Engineers provided Fehr & Peers guidance on the quantification of diverted trips. Due to the mix of land uses included as part of the Project, a portion of the trips generated by the individual uses will be internal to the Project site (e.g., a customer may fuel their vehicle and also patronize the McDonald's during the same visit to the property). For the purposes of this study, pass-by trips associated with the Project would divert off of Sheldon Road or East Stockton Boulevard to access the site before continuing their same direction of travel, and diverted link trips would be drawn from SR-99 and travel to/from the Project site via Sheldon Road/East Stockton Boulevard before continuing their journey on the freeway. **Table 3.5-4** shows the number of trips associated with the Project estimated using rates published in *Trip Generation Handbook, 8th Edition* and the adjustments made to account for internal, pass-by, and diverted link trips.

As shown in **Table 3.5-4**, the Project would generate 6,785 gross daily trips with 691 gross trips during the weekday AM peak hour and 523 gross trips during the weekday PM peak hour. Pursuant to standard traffic engineering practice, new trips as well as pass-by/diverted link trips are assigned to the study intersections and roadway segments in accordance with the *projected distribution pattern for Project trips*.

The distribution of Project trips was estimated using the following sources and analytical techniques:

- Review of existing travel patterns within the study area using traffic counts collected in January 2012.
- Traffic assignment using the City's travel demand forecasting model to spatially gauge the attractiveness of uses included in the Project to surrounding population centers.

When taking into consideration internal, pass-by, and diverted link trips, the Project would generate 1,802 net daily trips with 177 net trips during the weekday AM peak hour and 165 net trips during the weekday PM peak hour. For trip distribution refer to Traffic Study in **Appendix E**.

**TABLE 3.5-4
PROJECT TRIP GENERATION**

Land Use	Trip Rates ⁽²⁾				Project Trips			
	Weekday Trips	Peak Hour Trips		Units ⁽¹⁾	Unit Quantity	Daily Trips	Peak Hour Trips	
		AM	PM				AM	PM
Fast food Restaurant with Drive-through	496.05	49.47	33.95	Per 1,000 sf	3.8	1,885	188	129
Gas/Service Station with Conv. Market & Car Wash	152.81	11.94	13.94	vehicle positions	16	2,445	191	223
Coffee Shop with Drive-through	818.65	110.71	42.86	Per 1,000 sf	2.52	2,063	279	108
Retail	42.92	1.05	3.77	Per 1,000 sf	6.64	285	7	25
Office	59.44	14.44	21.11	Per 1,000 sf	1.8	107	26	38

3.5 TRAFFIC AND CIRCULATION

Land Use	Trip Rates ⁽²⁾				Project Trips			
	Weekday Trips	Peak Hour Trips		Units ⁽¹⁾	Unit Quantity	Daily Trips	Peak Hour Trips	
		AM	PM				AM	PM
Gross Trip Generation						6,785	691	523
Internal Trips						-346	-38	-28
Pass-by Trips ⁽³⁾						-3,346	-343	-238
Diverted Link Trips ⁽³⁾						-1,291	-133	-92
Net Trip Generation						1,802	177	165

Notes: ⁽¹⁾sf = square feet. ⁽²⁾Trip rates from trip generation (Institute of Transportation Engineers 2008). ⁽³⁾Pass-by/diverted link trips applied to fast food restaurant, gas/service station, and coffee shop.

Source: Fehr & Peers 2012

Level of Service Analysis

Intersections

Fehr & Peers analyzed all intersections using procedures and methodologies contained in the *Highway Capacity Manual (HCM)* prepared by the Transportation Research Board in 2000. These methodologies were applied using Synchro, a traffic operations analysis software package.

The HCM methodologies determine a LOS for each study intersection. LOS 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. **Table 3.5-5** presents the intersection LOS thresholds.

**TABLE 3.5-5
SIGNALIZED INTERSECTION LEVEL OF SERVICE THRESHOLDS**

Level of Service	Average Control Delay (Seconds/Vehicle) ⁽¹⁾
A	≤ 10.0
B	10.1-20.0
C	20.1-35.0
D	35.1-55.0
E	55.1-80.0
F	> 80.0

Notes: (1) Control delay includes initial deceleration delay, queue move-up time, stopped delay, and acceleration delay.

Source: Fehr & Peers 2012

The following assumptions were made:

- Pursuant to HCM procedures, the LOS for the four signalized study intersections was based on the average control delay for all vehicles.

- For the Existing and Existing Plus Project scenarios, peak hour factors for study intersections were calculated based upon the January 2012 counts. Under Cumulative No Project and Cumulative Plus Project conditions, peak hour factors for study intersections were set at the existing peak hour factor, or 0.92, whichever was higher.
- Intersection peak hour heavy-vehicle percentages were set at 2 percent based on data obtained during the January 2012 counts.
- Freeway mainline truck percentages were set at 10 percent with ramp percentages set at 2 percent.

Roadway Segments

Roadway segments were analyzed by comparing average 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 Sheldon Road were analyzed using thresholds for an arterial roadway with moderate access control. **Table 3.5-6** shows daily volume thresholds for each LOS category for two-, four-, six-, and eight-lane roadways with moderate access control.

Freeway Facilities

Pursuant to Caltrans standards, the freeway ramps and mainline were analyzed using procedures from the HCM (2010). This procedure determines the LOS based on the computed density, which is expressed in passenger cars per lane per mile. **Table 3.5-7** displays the density ranges associated with each LOS category for basic segments and ramp merge/diverge movements. Fehr & Peers used the Leisch Method to analyze weaving areas consistent with the methodology described in the HCM prepared by Caltrans (updated July 1, 2008).

**TABLE 3.5-6
ROADWAY SEGMENT LEVEL OF SERVICE THRESHOLDS**

Number of Lanes	Maximum Daily Volume ⁽¹⁾				
	LOS A	LOS B	LOS C	LOS D	LOS E
2	10,800	12,600	14,400	16,200	18,000
4	21,600	25,200	28,800	32,400	36,000
6	32,400	37,800	43,200	48,600	54,000
8	43,200	50,400	57,600	64,800	72,000

Notes: ⁽¹⁾ Thresholds apply to arterial roadways with moderate access control.

Source: Fehr & Peers 2012

3.5 TRAFFIC AND CIRCULATION

**TABLE 3.5-7
FREEWAY LEVEL OF SERVICE THRESHOLDS**

Level of Service	Density (Passenger Cars per Mile per Lane)	
	Mainline	Ramp Merge/Diverge
A	< 11	< 10
B	> 11 to 18	> 10 to 20
C	> 18 to 26	> 20 to 28
D	> 26 to 35	> 28 to 35
E	> 35 to 45	> 35
F	> 45 or any V/C ratio > 1.00 ⁽¹⁾	Demand exceeds capacity ⁽²⁾

Notes: ⁽¹⁾ V/C ratio = demand flow rate divided by the capacity of a given segment. ⁽²⁾ Occurs when freeway demand exceeds upstream (diverge) or downstream (merge) freeway segment capacity, or if off-ramp demand exceeds off-ramp capacity.

Source: Fehr & Peers 2012

PROJECT IMPACTS AND MITIGATION MEASURES

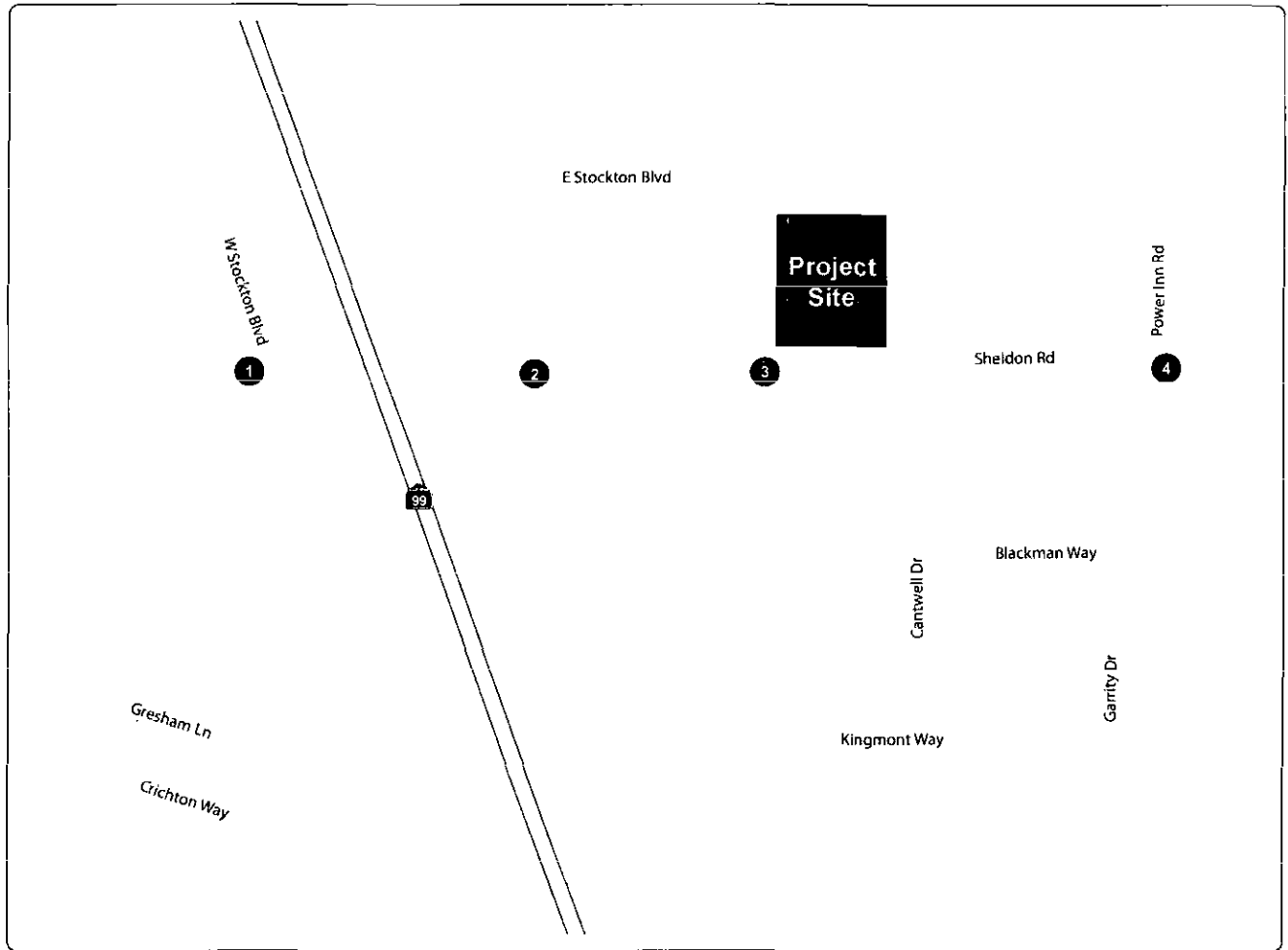
Roadway Network Operations (Standards of Significance 1 and 2)

Impact 3.5.1 Implementation of the Project would result in a decline in operations at various intersections, roadway segments, and freeway facilities. The significant and unavoidable decline in intersection operations was considered by the Elk Grove City Council for the Sheldon/99 GPA and Rezone Project. The proposed Project's effect on intersections, roadway segments, and freeway facilities **would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

As shown in **Table 3.5-4**, the Project would generate 6,785 gross daily trips with 691 gross trips during the weekday AM peak hour and 523 gross trips during the weekday PM peak hour. However, when taking into consideration internal, pass-by, and diverted link trips, the Project would generate 1,802 net daily trips with 177 net trips during the weekday AM peak hour and 165 net trips during the weekday PM peak hour. These trips, combined with existing 2012 peak hour trips, would affect operations on the roadway network under Existing Plus Project Conditions as described in detail below. Traffic generated during construction would be substantially less than that generated during Project operation, so construction traffic is captured in the assumptions for Project operation.

Intersection Operations

Figure 3.5-2 shows the peak hour traffic volumes, lane configurations, and traffic controls for each of the study intersections under Existing Plus Project conditions. **Table 3.5-8** summarizes the Project's effect on operations of the study intersections under Existing Plus Project conditions.



1. Sheldon Rd/SR 99 SB Ramps	2. Sheldon Rd/SR 99 NB Ramps	3. Sheldon Rd/E Stockton Blvd	4. Sheldon Rd/Garrity Dr/Power Inn Rd
<p>SR 99 SB Ramps</p> <p>Sheldon Rd</p> <p>W Stockton Blvd</p> <p>17 (27) 28 (51) 112 (68)</p> <p>168 (109) 801 (1,169) 273 (274)</p> <p>9 (23) 1,275 (966) 110 (165)</p> <p>178 (434) 11 (27) 166 (367)</p>	<p>SR 99 NB Ramps</p> <p>Sheldon Rd</p> <p>1,827 (1,617)</p> <p>1,132 (1,117) 421 (284)</p> <p>76 (200) 165 (285)</p>	<p>Sheldon Rd</p> <p>E Stockton Blvd</p> <p>186 (314) 28 (120) 70 (79)</p> <p>48 (26) 1,508 (1,183) 72 (113)</p> <p>307 (200) 939 (1,064) 51 (138)</p> <p>133 (120) 124 (58) 96 (135)</p>	<p>Sheldon Rd</p> <p>Power Inn Rd</p> <p>Garrity Dr</p> <p>508 (320) 31 (12) 135 (178)</p> <p>236 (98) 1,071 (946) 5 (19)</p> <p>431 (326) 615 (926) 49 (17)</p> <p>19 (12) 100 (19) 13 (5)</p>

LEGEND

- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Study Intersection
- Traffic Signal

Source: Fehr & Peers, 2012



City of Elk Grove
Development Services

FIGURE 3.5-2
Existing Plus Project Traffic Conditions

**TABLE 3.5-8
INTERSECTION LEVEL OF SERVICE—EXISTING PLUS PROJECT CONDITIONS**

Intersection	Traffic Control	Existing No Project		Existing Plus Project	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
		Delay/LOS	Delay/LOS	Delay/LOS	Delay/LOS
1. Sheldon Road/SR 99 Southbound Ramps	Signal	28/C	29/C	30/C	31/C
2. Sheldon Road/SR 99 Northbound Ramps	Signal	14/B	13/B	15/B	13/B
3. Sheldon Road/East Stockton Boulevard	Signal	24/C	22/C	33/C	25/C
4. Sheldon Road/Power Inn Road	Signal	43/D	26/C	47/D	26/C

Note: Intersection delay is based on the average intersection control delay for signalized intersections.
Source: Fehr & Peers 2012

As shown in **Table 3.5-8**, all study intersections would continue to operate at acceptable levels of service of LOS D or better and would experience no degradation in level of service under Existing Plus Project conditions. Therefore, the trips generated by the Project would be considered a **less than significant impact**. This conclusion is consistent with the findings in the Sheldon/99 GPA and Rezone EIR with the exception of Sheldon Road/East Stockton Boulevard Intersection (see Impact 4.5.1 of the Sheldon/99 GPA and Rezone EIR), which was previously identified as a significant and unavoidable impact (Elk Grove 2009). Since the Sheldon/99 GPA and Rezone EIR was prepared, the Sheldon Road/SR 99 interchange improvements have been constructed, which improved operations at the Sheldon Road/East Stockton Boulevard Intersection. **The proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact.**

Roadway Segment Operations

Table 3.5-9 summarizes the Project's effect on operations of the study roadway segments under Existing Plus Project conditions.

**TABLE 3.5-9
ROADWAY SEGMENT LEVEL OF SERVICE—EXISTING PLUS PROJECT CONDITIONS**

Sheldon Road between	Daily Capacity ⁽¹⁾	Existing No Project			Existing Plus Project		
		ADT	V/C Ratio	LOS ⁽²⁾	ADT	V/C Ratio	LOS ⁽²⁾
1. SR 99 Northbound Ramps to East Stockton Boulevard	54,000	33,500	0.62	B	36,000	0.67	B
2. East Stockton Boulevard to Power Inn Road	54,000	25,500	0.47	A	25,800	0.48	A

Notes: ⁽¹⁾ The capacity of each roadway is based on the number of lanes and the facility type. ⁽²⁾ Level of service (LOS) based on the City of Elk Grove Traffic Impact Analysis Guidelines (July 2000).

Source: Fehr & Peers 2012

3.5 TRAFFIC AND CIRCULATION

As shown in **Table 4.5-9**, study roadway segments would continue to operate at acceptable LOS of LOS A or LOS B under Existing Plus Project conditions which would be considered a **less than significant impact**. This conclusion is consistent with the Sheldon/99 GPA and Rezone EIR (see Impact 4.5.2), which identified impacts to roadway segments as a less than significant impact (Elk Grove 2009).

Freeway Facility Operations

Table 3.5-10 summarizes the Project's effect on operations of the study freeway segments under Existing Plus Project conditions.

**TABLE 3.5-10
FREEWAY ANALYSIS—EXISTING PLUS PROJECT CONDITIONS**

State Route 99 Segment	Control	Existing Conditions		Existing Plus Project	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
		Density/LOS	Density/LOS	Density/LOS	Density/LOS
1. Northbound—Bond Road/Laguna Boulevard Slip On-ramp	Merge/Diverge Overlap Area ⁽¹⁾	26/C	29/D	26/C	29/D
2. Northbound—Sheldon Road Off-ramp		30/D	34/D	31/D	34/D
3. Northbound—Sheldon Road Loop On-ramp	Merge Movement	27/C	27/C	27/C	27/C
4. Northbound—Sheldon Road Slip On-ramp	Merge Movement	31/D	28/C	31/D	28/C
5. Northbound between Sheldon Road and Calvine Road	Basic Freeway Segment	35/E	29/D	36/E	30/D
7. Northbound—Calvine Road Off-ramp	Diverge Movement	39/E	35/D	39/E	35/D
7. Southbound—Calvine Road On-ramp	Merge Movement	26/C	35/D	26/C	35/D
8. Southbound between Calvine Road and Sheldon Road	Basic Freeway Segment	25/C	38/E	25/C	39/E
9. Southbound—Sheldon Road Off-ramp	Diverge Movement	6/A	16/B	6/A	16/B
10. Southbound—Sheldon Road On-ramp	Weaving Area ²	-/C	-/D	-/C	-/D
Southbound—Bond Road/Laguna Boulevard Off-ramp					

Notes: **Bold** text indicates unacceptable operations. Density is the number of passenger cars per mile per lane. ⁽¹⁾For segments that consist of merge/diverge overlap areas, segment operation is the worst operating condition among the merge and diverge movement. ⁽²⁾The Leisch Method does not compute density.

Source: Fehr & Peers 2012

As shown in **Table 3.5-10**, three study freeway segments would operate at unacceptable LOS under Existing and Existing Plus Project conditions. The SR 99 northbound segment between Sheldon Road and Calvine Road and the northbound diverge at Calvine Road would continue to operate at an unacceptable level of LOS E during the AM peak hour and the southbound segment between Calvine Road and Sheldon Road would continue to operate at an unacceptable level of LOS E during the PM peak hour under Existing and Existing Plus Project conditions. It is important to note that one additional vehicle per mile per lane, as shown for existing conditions versus plus Project conditions for the southbound segment of SR 99 between Calvine Road and Sheldon Road, as shown in **Table 3.5-10**, would not result in a perceptible difference in operation of the freeway segment. The LOS is consistent between existing conditions and plus Project conditions, at LOS E.

An impact is considered significant on facilities that are or would be (under cumulative conditions) operating at unacceptable LOS without the Project if the Project: increases the V/C ratio on a freeway mainline segment or freeway ramp junction by 0.05 or more; or increases the number of peak hour vehicles on a freeway mainline segment or freeway ramp junction by more than 5 percent. Although the addition of Project trips to study freeway segments would exacerbate existing unacceptable operations during the AM and PM peak hours, the addition of Project trips would not increase the number of peak hour vehicles by more than 5 percent or increase the V/C ratio by 0.05 as shown in **Table 3.5-11**. Therefore, the trips generated on the study freeway segments by the Project would be considered a **less than significant impact**. This conclusion is consistent with the Sheldon/99 GPA and Rezone EIR (see Impact 4.5.2), which identified impacts to freeway segments as a less than significant impact (Elk Grove 2009). Therefore, increases in trips were considered in the previous document and the proposed Project's effect on intersections, roadway segments, and freeway facilities **would not result in a new significant impact or substantially increase the severity of a previously identified significant impact**.

**TABLE 3.5-11
FREEWAY SEGMENT VOLUME AND V/C RATIO CHECK—EXISTING PLUS PROJECT CONDITIONS**

State Route 99 Segment	Peak Hour Volume Check						V/C Ratio Check		
	Existing Volume		Project Volume		% Increase		Capacity ⁽¹⁾	Ratio Increase	
	AM	PM	AM	PM	AM	PM		AM	PM
Northbound—Bond Road to Sheldon Road	2,903	3,262	17	12	<1	<1	4,000	<0.01	<0.01
Northbound—Sheldon Road to Calvine Road	3,746	3,319	16	20	<1	<1		<0.01	<0.01
Southbound—Calvine Road to Sheldon Road	2,927	3,932	23	16	<1	<1		<0.01	<0.01
Southbound—Sheldon Road to Laguna Blvd.	2,992	3,596	11	15	<1	<1		<0.01	<0.01

Notes: ⁽¹⁾ Peak hour capacity based on 10 percent of daily capacity from City of Elk Grove Traffic Impact Analysis Guidelines (July 2000).

Source: Fehr & Peers 2012

3.5 TRAFFIC AND CIRCULATION

Mitigation Measures

None required.

Circulation System Performance (Standards of Significance 1 and 2)

Impact 3.5.2 Implementation of the Project would result in an increase on the demand on the circulation system, including the roadway network, mass transit, and bicycle and pedestrian facilities. This is considered a **less than significant impact**.

Buildout of the Sheldon/99 GPA and Rezone EIR Project area would result in an increase in population of approximately 735 persons and implementation of the Project would result in the generation of 1,802 net daily vehicle trips.

The Circulation Element provides policies for all types of transportation in the City: vehicles (auto and truck), light and heavy rail, public transit, bicycling, pedestrian, and air. The Circulation Element includes master plans for roadways, bicycle, transit, and other transit modes, and defines the level of service (or level of congestion) the City will seek to maintain on roadways. The Circulation Element also addresses congestion management requirements pursuant to Government Code Section 65088 et seq. Policies of the General Plan that establish effectiveness of performance of the circulation system are primarily focused on the performance of the roadway network, which include the following:

"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."

As discussed in **Impact 3.5.1**, the trips generated by the Project would not result in unacceptable LOS at study intersections and roadways segments, and, therefore, would not conflict with General Plan Policies CI-13 or CI-14. A sidewalk would be provided along the Project site frontage on East Stockton Boulevard. The Project would not disrupt or interfere with existing or planned bicycle or pedestrian facilities because it does not propose uses that would interfere with any such facilities. Project driveways would be designed and constructed so that they provide as much safety to bicycle and pedestrian facilities as possible, so vehicles entering and exiting the Project site would not interfere with operations of those facilities. There are no specific plans, ordinances, or policies establishing the effectiveness of performance of the bicycle and/or pedestrian facilities within the vicinity of the Project site. Employees and patrons at the Project site would have access to a nearby transit stop that serves three bus service lines: Neighborhood Route 160, Commuter Route 59, and Commuter Route 60. The Project would not disrupt or interfere with existing or planned transit operations or facilities. Since the Project would not conflict with plans establishing the effectiveness of the performance of the circulation system, this would be considered a **less than significant impact**.

Mitigation Measures

None required.

3.5.4 CUMULATIVE IMPACTS AND MITIGATION MEASURES**CUMULATIVE SETTING**

The City's traffic demand forecast model was used to develop cumulative (year 2035) traffic volumes at the study roadway facilities. The cumulative version of this model reflects planned land use growth both within the City and the surrounding region and incorporates planned improvements to the surrounding transportation system.

Figure 3.5-3 presents the forecasted Cumulative No Project traffic volumes, lane configurations, and traffic controls. Since no roadway improvement Projects are currently planned within the study area, all lane configurations and traffic controls at the study intersections are identical under Existing and Cumulative No Project conditions. However, traffic volume is anticipated to increase along Sheldon Road as new development occurs in the area. Total intersection traffic volume at the Sheldon Road/East Stockton Boulevard intersection, adjacent to the Project site, is forecasted to increase approximately 65 percent over the existing AM peak hour volumes, and increase approximately 68 percent over the existing PM peak hour volumes.

Intersection Operations

Table 3.5-12 summarizes study intersection operations under Cumulative No Project conditions.

TABLE 3.5-12
INTERSECTION LEVEL OF SERVICE—CUMULATIVE NO PROJECT CONDITIONS

Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
		Delay (Seconds/Vehicle)	LOS	Delay (Seconds/Vehicle)	LOS
1. Sheldon Road/SR 99 Southbound Ramps	Signal	40	D	45	D
2. Sheldon Road/SR 99 Northbound Ramps	Signal	28	C	21	C
3. Sheldon Road/East Stockton Boulevard	Signal	65	E	33	C
4. Sheldon Road/Power Inn Road	Signal	47	D	34	C

Note: Intersection delay is based on the average intersection control delay for signalized intersections.

Source: Fehr & Peers 2012

As shown in **Table 3.5-12**, all study intersections would operate at LOS D or better under Cumulative No Project conditions, with the exception of the Sheldon Road/East Stockton Boulevard intersection, which operates at LOS E during the AM peak hour. Delays at this intersection during the AM peak hour result primarily from the forecasted heavy westbound through trip volumes traveling toward SR 99.

Roadway Segment Operations

Table 3.5-13 summarizes study roadway segment operations under Cumulative No Project conditions.

3.5 TRAFFIC AND CIRCULATION

**TABLE 3.5-13
ROADWAY SEGMENT LEVEL OF SERVICE—CUMULATIVE NO PROJECT CONDITIONS**

Sheldon Road between	Daily Capacity ⁽¹⁾	Cumulative No Project		
		ADT	V/C Ratio	LOS ⁽²⁾
1. SR 99 Northbound Ramps to East Stockton Boulevard	54,000	54,100	1.00	F
2. East Stockton Boulevard to Power Inn Road	54,000	36,100	0.67	B

Notes: ⁽¹⁾The capacity of each roadway is based on the number of lanes and the facility type. ⁽²⁾Level of service (LOS) based on the City of Elk Grove Traffic Impact Analysis Guidelines (July 2000).

Source: Fehr & Peers 2012

As shown in **Table 3.5-13**, one study roadway segment would operate at unacceptable levels of service under Cumulative No Project. Sheldon Road would operate at LOS F west of East Stockton Boulevard and LOS B east of East Stockton Boulevard under Cumulative No Project conditions.

Freeway Facility Operations

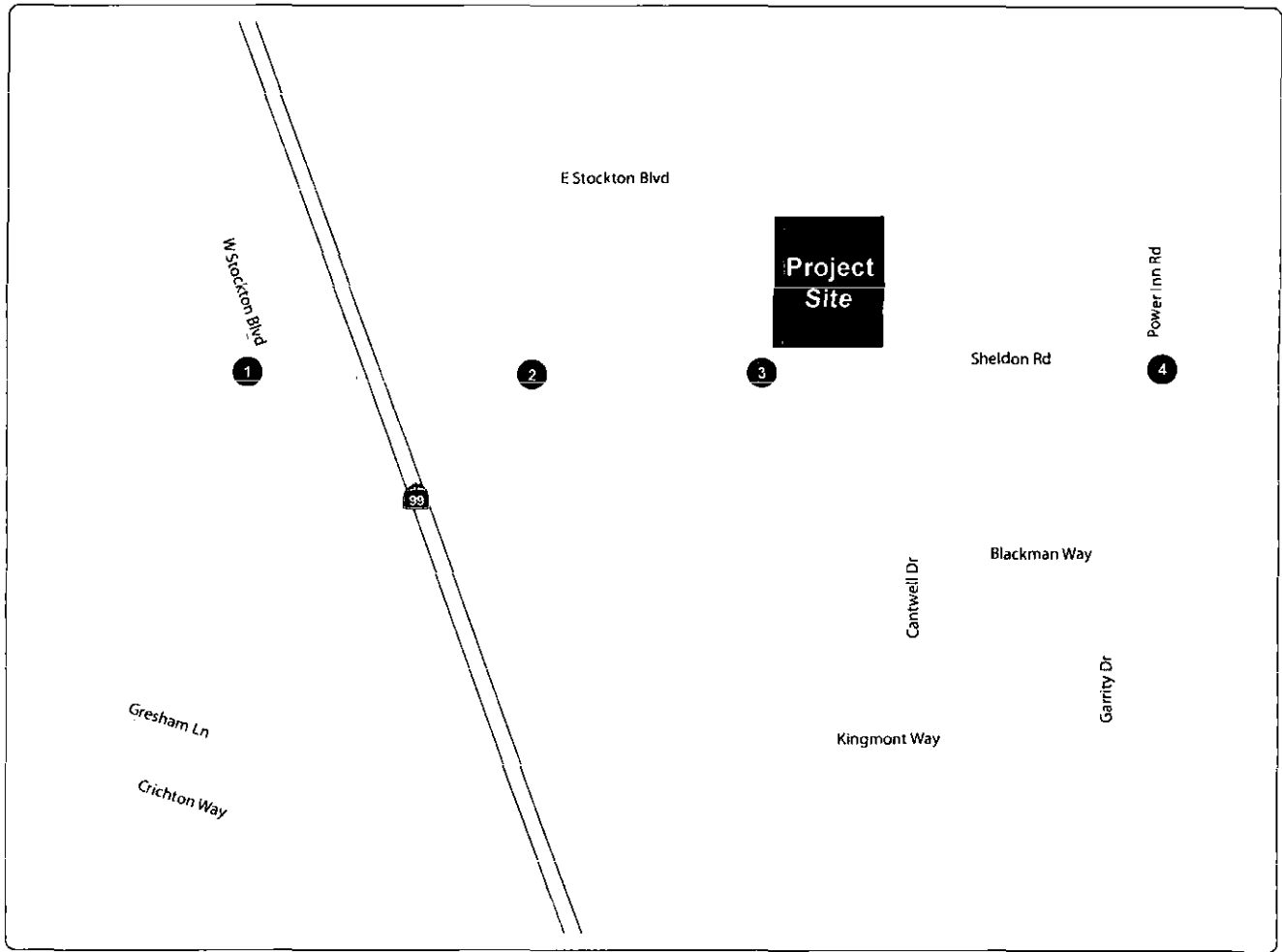
Table 3.5-14 summarizes operations at each of the study freeway facilities under Cumulative No Project Conditions.

**TABLE 3.5-14
FREEWAY ANALYSIS—CUMULATIVE NO PROJECT CONDITIONS**

State Route 99 Segment	Control	AM Peak Hour		PM Peak Hour	
		Density	LOS	Density	LOS
1. Northbound—Bond Road/Laguna Boulevard Slip On-ramp	Merge/Diverge Overlap Area ⁽¹⁾	33	D	37	E
2. Northbound—Sheldon Road Off-ramp		39	E	43	E
3. Northbound—Sheldon Road Loop On-ramp	Merge Movement	32	D	34	D
4. Northbound—Sheldon Road Slip On-ramp	Merge Movement	—	F	36	E
5. Northbound between Sheldon Road and Calvine Road	Basic Freeway Segment	—	F	—	F
6. Northbound—Calvine Road Off-ramp	Diverge Movement	—	F	—	F
7. Southbound—Calvine Road On-ramp	Merge Movement	37	E	—	F
8. Southbound between Calvine Road and Sheldon Road	Basic Freeway Segment	44	E	—	F
9. Southbound—Sheldon Road Off-ramp	Diverge Movement	19	B	—	F
10. Southbound—Sheldon Road On-ramp	Weaving Area ²	—	E	—	E
11. Southbound—Bond Road/Laguna Boulevard Off-ramp		—	E	—	E

Notes: **Bold** text indicates unacceptable operations. Density is the number of passenger cars per mile per lane. ⁽¹⁾For segments that consist of merge/diverge overlap areas, segment operation is the worst operating condition among the merge and diverge movement. ⁽²⁾The Leisch Method does not compute density.

Source: Fehr & Peers 2012



1. Sheldon Rd/SR 99 SB Ramps	2. Sheldon Rd/SR 99 NB Ramps	3. Sheldon Rd/E Stockton Blvd	4. Sheldon Rd/Garrity Dr/Power Inn Rd
<p>60 (40) 70 (70) 160 (100)</p> <p>330 (250) 1,370 (1,210) 510 (330)</p> <p>Sheldon Rd</p> <p>SR 99 SB Ramps</p> <p>140 (210) 1,650 (1,900) 210 (190)</p> <p>430 (610) 50 (70) 450 (730)</p> <p>W Stockton Blvd</p>	<p>840 (380) 2,210 (1,790)</p> <p>Sheldon Rd</p> <p>SR 99 NB Ramps</p> <p>1,610 (2,180) 650 (550)</p> <p>330 (300) 440 (580)</p>	<p>230 (340) 150 (150) 50 (150)</p> <p>100 (110) 2,160 (1,240) 100 (80)</p> <p>Sheldon Rd</p> <p>E Stockton Blvd</p> <p>420 (440) 1,220 (1,870) 410 (450)</p> <p>330 (290) 180 (240) 130 (140)</p>	<p>610 (340) 60 (20) 160 (200)</p> <p>260 (110) 1,710 (1,070) 10 (40)</p> <p>Sheldon Rd</p> <p>Garrity Dr Power Inn Rd</p> <p>530 (520) 780 (1,610) 90 (30)</p> <p>40 (20) 100 (40) 20 (10)</p>

LEGEND

- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Study Intersection
- Traffic Signal

Source: Fehr & Peers, 2012



FIGURE 3.5-3
Cumulative No Project Traffic Conditions

As shown in **Table 3.5-14**, all study freeway facilities would operate at unacceptable levels of service of LOS E or worse during at least one of the peak hours under Cumulative No Project conditions, with the exception of the SR 99 northbound merge at the Sheldon Road loop on-ramp, which would operate at an acceptable LOS D during both study peak hours.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Roadway Network Cumulative Operations (Standards of Significance 1 and 2)

Impact 3.5.3 Implementation of the Project, combined with other development in the area, would decrease operations at various intersections, roadway segments, and freeway facilities under Cumulative Plus Project conditions. The Sheldon/99 GPA and Rezone EIR determined the Sheldon/99 GPA and Rezone project would have a cumulatively considerable contribution to intersection operations. **The proposed Project's contribution would not result in new significant impacts or substantially increase the severity of previously identified significant impacts.**

Trips generated by the Project combined with other development and roadway improvements anticipated in the area by 2035 would contribute to the operations of the roadway network under Cumulative Plus Project conditions.

Intersection Operations

Figure 3.5-4 shows the peak hour traffic volumes, lane configurations, and traffic controls for each of the study intersections under Cumulative Plus Project conditions. **Table 3.5-15** summarizes traffic operations at each of the study intersections under Cumulative No Project and Cumulative Plus Project conditions.

TABLE 3.5-15
INTERSECTION LEVEL OF SERVICE—CUMULATIVE NO PROJECT AND CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Traffic Control	Cumulative No Project		Cumulative Plus Project	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
		Delay/LOS	Delay/LOS	Delay/LOS	Delay/LOS
1. Sheldon Road/SR 99 Southbound Ramps	Signal	40/D	45/D	42/D	46/D
2. Sheldon Road/SR 99 Northbound Ramps	Signal	28/C	21/C	27/C	21/C
3. Sheldon Road/East Stockton Boulevard	Signal	65/E	33/C	82/F	42/D
4. Sheldon Road/Power Inn Road	Signal	47/D	34/C	49/D	34/C

Note: Intersection delay is based on the average intersection control delay for signalized intersections. **Bold** text indicates unacceptable operations.

Source: Fehr & Peers 2012

As shown in **Table 3.5-15**, one intersection would operate at unacceptable levels of service during the AM peak hour under Cumulative Plus Project conditions. Trips generated by the proposed Project would result in the level of service at the Sheldon Road/East Stockton Boulevard intersection degrading from an acceptable level of service of LOS E to unacceptable LOS F conditions during the AM peak hour and from LOS C to LOS D during the PM peak hour.

3.5 TRAFFIC AND CIRCULATION

Increased demand for the eastbound left-turn movement (due primarily to diverted and pass-by trips) at the Sheldon Road/East Stockton Boulevard intersection and the opposing heavy westbound traffic flow on Sheldon Road during the AM peak hour would be the primary contributor to increased delays at this intersection.

Since the trips generated at study intersections by the proposed Project would degrade the level of service from an acceptable LOS E or better (without the Project) to an unacceptable LOS F (with the Project), this is a **potentially significant impact**.

Mitigation Measure

MM 3.5.3 The Project applicant shall pay a fair-share contribution toward the installation of a right-turn overlap phase on the southbound approach to the Sheldon Road/East Stockton Boulevard intersection.

Payment of the fee shall be collected prior to issuance of building permit. Roadway improvements shall be constructed prior to issuance of final occupancy.

Installation of the above mitigation measure would provide funding to construct a right-turn overlap phase on the southbound approach to the Sheldon Road/East Stockton Boulevard intersection, which would provide acceptable level of service of LOS E under Cumulative Plus Project conditions. The overlap phase would require prohibiting eastbound-to-westbound Sheldon Road U-turn movements. Demand for U-turn movements at this intersection is anticipated to be low, since there are no driveways proposed on the segment of Sheldon Road between East Stockton Boulevard and the SR 99 northbound on-ramp. These movements could be accommodated by using East Stockton Boulevard (by way of the roundabout north of Sheldon Road) or by making a U-turn at the Sheldon Road/Power Inn Road intersection. While the Sheldon/99 GPA and Rezone project's contribution was considerable and therefore, significant and unavoidable, with implementation of the above mitigation measure, the intersection would operate at an acceptable level. Therefore, this impact would be less than significant and **the proposed Project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts**.

Roadway Segment Operations

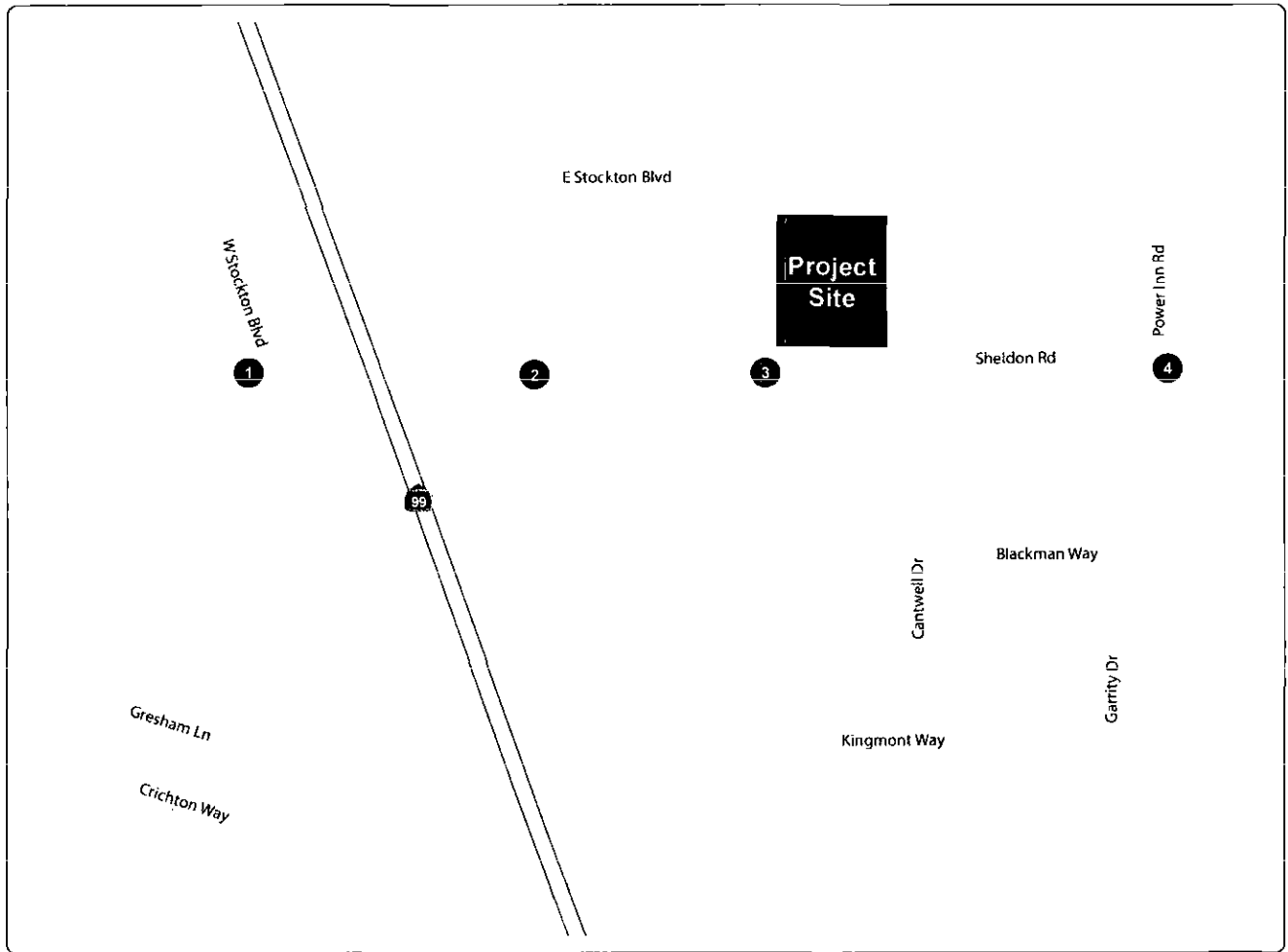
Table 3.5-16 summarizes traffic operations at each of the study roadway segments under Cumulative Plus Project conditions.

**TABLE 3.5-16
ROADWAY SEGMENT LEVEL OF SERVICE—CUMULATIVE PLUS PROJECT CONDITIONS**

Roadway Segment	Daily Capacity ¹	Cumulative No Project			Cumulative Plus Project		
		ADT	V/C Ratio	LOS ²	ADT	V/C Ratio	LOS ²
Sheldon Road–SR 99 Northbound Ramps to East Stockton Boulevard	54,000	54,100	1.00	F	56,400	1.04	F
Sheldon Road–East Stockton Boulevard to Power Inn Road	54,000	36,100	0.67	B	36,500	0.68	B

Notes: **Bold** text indicates unacceptable operations. ⁽¹⁾The capacity of each roadway is based on the number of lanes and the facility type. ⁽²⁾Level of service (LOS) based on the City of Elk Grove Traffic Impact Analysis Guidelines (July 2000).

Source: Fehr & Peers 2012



1. Sheldon Rd/SR 99 SB Ramps	2. Sheldon Rd/SR 99 NB Ramps	3. Sheldon Rd/E Stockton Blvd	4. Sheldon Rd/Garrity Dr/Power Inn Rd
<p>Sheldon Rd</p> <p>SR 99 SB Ramps</p> <p>W Stockton Blvd</p> <p>60 (40) 70 (70) 163 (103)</p> <p>332 (253) 1,381 (1,230) 530 (362)</p> <p>140 (210) 1,668 (1,916) 210 (190)</p> <p>430 (610) 50 (70) 478 (763)</p>	<p>Sheldon Rd</p> <p>SR 99 NB Ramps</p> <p>2,783 (1,955)</p> <p>1,659 (2,232) 650 (550)</p> <p>330 (300) 472 (603)</p>	<p>Sheldon Rd</p> <p>E Stockton Blvd</p> <p>268 (388) 154 (168) 118 (217)</p> <p>118 (129) 2,185 (1,277) 100 (80)</p> <p>548 (555) 1,173 (1,830) 410 (450)</p> <p>330 (290) 187 (247) 130 (140)</p>	<p>Sheldon Rd</p> <p>Garrity Dr</p> <p>Power Inn Rd</p> <p>614 (344) 60 (20) 160 (200)</p> <p>260 (110) 1,719 (1,078) 10 (40)</p> <p>533 (525) 785 (1,620) 91 (32)</p> <p>41 (21) 100 (40) 20 (10)</p>

LEGEND

- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Study Intersection
- Traffic Signal

Source: Fehr & Peers, 2012



FIGURE 3.5-4
Cumulative Plus Project Traffic Conditions

As shown in, **Table 3.5-16** one roadway segment would continue to operate at unacceptable levels of service. Sheldon Road would continue to operate at LOS F west of East Stockton Boulevard under Cumulative Plus Project conditions. This unacceptable level of service is consistent with the Sheldon/99 GPA and Rezone EIR (see Impact 4.5.4), which was previously disclosed to be cumulatively considerable and a significant and unavoidable impact. However, while the contribution of trips from development of the entire Sheldon/99 GPA and Rezone project would remain significant, the increase in V/C ratio with the Project would be less than 0.05. Therefore, the trips generated on study roadway segments by the Project would not be cumulatively considerable and this would be considered a less than significant cumulative impact. **The proposed Project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts**

Freeway Facility Operations

Table 3.5-17 summarizes the operations of the study freeway segments under Cumulative Plus Project conditions.

**TABLE 3.5-17
FREEWAY ANALYSIS—CUMULATIVE PLUS PROJECT CONDITIONS**

State Route 99 Segment	Control	AM Peak Hour		PM Peak Hour	
		Density	LOS	Density	LOS
1. Northbound—Bond Road/Laguna Boulevard On-ramp	Merge/Diverge Overlap Area ⁽¹⁾	33	D	37	E
2. Northbound—Sheldon Road Off-ramp		39	E	43	E
3. Northbound—Sheldon Road Loop On-ramp	Merge Movement	32	D	34	D
4. Northbound—Sheldon Road Slip On-ramp	Merge Movement	--	F	36	E
5. Northbound between Sheldon Road and Calvine Road	Basic Freeway Segment	--	F	--	F
6. Northbound—Calvine Road Off-ramp	Diverge Movement	--	F	--	F
7. Southbound—Calvine Road On-ramp	Merge Movement	37	E	--	F
8. Southbound between Calvine Road and Sheldon Road	Basic Freeway Segment	45	E	--	F
9. Southbound—Sheldon Road Off-ramp	Diverge Movement	19	B		F
10. Southbound—Sheldon Road On-ramp	Weaving Area ²	--	E	--	E
11. Southbound—Bond Road/Laguna Boulevard Off-ramp					

Notes: **Bold** text indicates unacceptable operations. Density is the number of passenger cars per mile per lane. ⁽¹⁾For segments that consist of merge/diverge overlap areas, segment operation is the worst operating condition among the merge and diverge movement. ⁽²⁾The Leisch Method does not compute density.

Source: Fehr & Peers 2012

As shown in **Table 3.5-17**, all study freeway facilities identified to operate at unacceptable levels of service of LOS E or F under Cumulative No Project conditions would continue to operate at LOS E or F under Cumulative Plus Project conditions during the AM and PM peak hours. **Table 3.5-18** summarizes the freeway segment volume increase and volume to capacity increase under Cumulative Plus Project conditions.

3.5 TRAFFIC AND CIRCULATION

**TABLE 3.5-18
VOLUME AND V/C RATIO CHECK—CUMULATIVE PLUS PROJECT CONDITIONS**

State Route 99	Peak Hour Volume Check						V/C Ratio Check		
	Cumulative Volume		Project Volume		% Increase		Capacity ⁽¹⁾	V/C Ratio Increase	
	AM	PM	AM	PM	AM	PM		AM	PM
Northbound—Bond Road to Sheldon Road	3,790	4,210	15	11	<1	<1	4,000	<0.0 1	<0.01
Northbound—Sheldon Road to Calvine Road	4,510	4,260	13	17	<1	<1		<0.0 1	<0.01
Southbound—Calvine Road to Sheldon Road	4,220	5,080	20	14	<1	<1		<0.0 1	<0.01
Southbound—Sheldon Road to Laguna Blvd.	4,080	4,260	10	13	<1	<1		<0.0 1	<0.01

Notes: ⁽¹⁾ Peak-hour capacity based on 10% of daily capacity from City of Elk Grove Traffic Impact Analysis Guidelines (July 2000).

Source: Fehr & Peers, 2012

As shown in **Table 3.5-18**, the trips generated by the Project would not increase the number of peak hour vehicles by more than 5 percent or increase the V/C ratio by 0.05 on the freeway segments, and this increase in volume would not be discernible to those traveling on SR 99. Therefore, while the contribution of trips from development of the entire Sheldon/99 GPA and Rezone project would remain significant, the trips generated on the study freeway segments by the Project would not be cumulatively considerable and this would be considered a less than significant cumulative impact. **The proposed Project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts.**

Mitigation Measures

None required.

REFERENCES

Caltrans (California Department of Transportation). 2002. Guide for the Preparation of Traffic Impact Studies.

Elk Grove, City of. 2000. *Traffic Impact Analysis Guidelines*.

———. 2009. *City of Elk Grove General Plan*. Adopted November 2003; amended through July 22, 2009. Elk Grove, CA.

———. 2009. *Sheldon/99 GPA and Rezone Environmental Impact Report* (SCH No. 2007122045). Elk Grove, CA.

Fehr & Peers. 2012. *Traffic Study for East Stockton Boulevard/Sheldon Road*. Roseville, CA.

4.0 OTHER CEQA CONSIDERATIONS

This section discusses the additional topics statutorily required by the California Environmental Quality Act (CEQA). The topics discussed include significant irreversible environmental changes/irretrievable commitment of resources and growth-inducing impacts.

4.1 GROWTH-INDUCING IMPACTS

INTRODUCTION

CEQA Guidelines Section 15126.2(d) requires that an environmental impact report (EIR) evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

...the ways in which a proposed 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 must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

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. 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 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 community or region are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and nonresidential 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.

4.0 OTHER CEQA CONSIDERATIONS

GROWTH EFFECTS OF THE PROJECT

As required by Government Code Section 65300, the General Plan is intended to serve as the overall plan for the physical development of the City of Elk Grove. While the General Plan does not specifically propose any development projects, it does regulate the location and type of future development and thus controls future population and economic growth of the City that would result in indirect growth-inducing effects.

Implementation of the proposed Project would result in similar uses as assumed in the Sheldon/99 GPA and Rezone EIR, but at different locations, which would locate Commercial land uses—instead of High Density Residential—in proximity to existing Low Density Residential land uses. The area east of East Stockton Boulevard and north of Sheldon Road was designated for High Density Residential land uses in the Sheldon/99 GPA and Rezone EIR. The proposed Project would change the land use designation to all Commercial land uses. The Sheldon/99 GPA and Rezone EIR identified that the changing land use designations and zoning to commercial uses on Sheldon Road would create a cohesive area available for future retail development. Land north and east of the East Stockton Boulevard alignment and land south of Sheldon Road (east of East Stockton Boulevard) was also designated for Commercial land uses by the Sheldon/99 GPA and Rezone EIR. The Project site is located in an urbanized area that is currently developed primarily as rural residential land uses. The specific environmental effects resulting from the proposed land use patterns and associated extension of public services were discussed in Section 4.1 through Section 4.11 of the Sheldon/99 GPA and Rezone EIR.

It should be noted that the Project site is located within the incorporated City limits. No lands are proposed for annexation. In addition, no roadway improvements which would increase capacity on local roads are included as part of the proposed Project.

Population Growth

Implementation of the proposed Project would create jobs in association with the construction and operation of commercial land uses on the Project site. While the Project would provide jobs associated with these uses, it would not be a substantial generator of new jobs that would result in an influx of new residents to fill these jobs that had not been previously considered by the City. Historically, Elk Grove has had a jobs-housing imbalance, with more households in the City than jobs available for the households. The increase in employment opportunities associated with the proposed Project would help to improve the jobs-housing balance by increasing job opportunities for local residents.

The Sheldon/99 GPA and Rezone EIR identified that the high-density development could result in approximately 237 residential units (20 units per acre multiplied by 11.85 acres of RD-20 zoning), which would result in a population increase of 735 persons (3.10 persons per household multiplied by 237 housing units). The proposed Project would reduce this increase in population by changing the High Density Residential land use to Commercial land use. Therefore, the Project would not create an increase in population or demand for housing beyond that already anticipated in the Sheldon/99 GPA and Rezone EIR. Employees of future commercial businesses on the Project site may also live outside the City of Elk Grove in other jurisdictions; however, the location where future employees would choose to live or the number that would locate in any particular jurisdiction cannot be determined at this time.

Growth Effects Associated with Infrastructure Improvements

The proposed Sheldon/99 GPA and Rezone Project could potentially indirectly induce growth if it would remove 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 and Elk Grove Water Service for water supply, Sacramento Regional County Sanitation District and County Sanitation District 1 for wastewater service, and 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 Project site is located in an area that is, for the most part, urbanized. The surrounding residential neighborhoods and commercial uses west of State Route 99 are serviced by existing utility infrastructure. The Project site itself is a mixture of vacant land and rural residential development.

Infrastructure is currently available to the Project site, and the proposed Project would not result in indirect population growth through the extension of infrastructure or roadways. As discussed under Section 4.10 Public Services and Utilities of the Sheldon/99 GPA and Rezone EIR, the size and location of utility infrastructure would be contingent on the type and design of development proposed. Ultimately, the Project site would connect to existing or planned transmission water mains and sewer interceptors in the area. There is a 16-inch water pipeline along Sheldon Road, and 12-inch pipeline along East Stockton Boulevard on the western boundary of the Project site north of Sheldon Road (Elk Grove 2009b). In terms of sewer infrastructure, the Project site is part of the Highway 99/Sheldon Trunk Shed and the sewer lines are in place. Therefore, development of the Project site would not result in a significant extension of infrastructure facilities.

The Project does not include any roadway improvements that would add capacity and accommodate increased traffic volumes. Therefore, the Project would not result in any growth effects associated with increasing roadway capacity.

ENVIRONMENTAL EFFECTS OF GROWTH

The proposed Project would result in increased employment in Elk Grove, therefore, considered to be growth-inducing. The environmental effects of this growth would be similar to those envisioned in association with implementation of the existing land uses identified in the Elk Grove General Plan and would not result in substantial changes to demands for public services and utilities. The Sheldon/99 GPA and Rezone EIR as well as Sections 4.1 through 4.5 of this Draft SEIR identify the potential increase in physical effects on the environment associated with implementation of the proposed Project.

4.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Sections 21100(b)(2) and 21100.1(a) require 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 of Project implementation. In addition, 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

4.0 OTHER CEQA CONSIDERATIONS

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 Elk Grove General Plan EIR (SCH No. 2002062082) evaluated significant irreversible environmental effects associated with implementation of the adopted General Plan. That EIR identified that the conversion of undeveloped open space land areas to residential, commercial, industrial, office, public and recreational uses would occur with implementation of the General Plan.

Development of the City of Elk Grove Land Use Policy Plan Map constitutes a long-term commitment to residential, commercial, and office 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 Sheldon/99 GPA and Rezone Project would result in the increased demand on public services and utilities (see Section 4.7 Hydrology and Water Quality and 4.11 Public Services and Utilities of that Draft EIR); however, the proposed Project would not increase the demand on public service and utilities beyond that previously identified in the Sheldon/99 GPA and Rezone EIR.

All of the parcels on the Project site are designated for urban development on the General Plan Land Use Policy Map. However, land uses allowed by the proposed Project would be more intensive than those currently allowed on the site by the General Plan. Specifically, commercial uses would consume more energy and natural resources than low- and medium-density residential uses. Therefore, the proposed Project is anticipated to result in significant irreversible impacts slightly greater than those discussed in the Elk Grove General Plan EIR. However, the increase would not be more significant than that previously identified in the Sheldon/99 GPA and Rezone EIR or General Plan, as development of the site under either land use scenario would result in the Project site being permanently converted to more intensive urban uses than currently exist on the Project site.

4.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

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. In addition, Section 15093(a) of the CEQA Guidelines allows the decision-making agency to determine if the benefits of a proposed Project outweigh the unavoidable adverse environmental impacts of implementing the Project. The City can approve a Project with unavoidable adverse impacts if it prepares a Statement of Overriding Considerations, setting forth the specific reasons for making such a judgment.

The Sheldon/99 GPA and Rezone EIR identified the following significant and unavoidable impacts:

TRAFFIC AND CIRCULATION

Decline in Intersection Operations under Existing Plus Project Conditions

Decline in Intersection Operations under Existing Plus Cumulative Project Conditions

Decline in Roadway Operations under Existing Plus Cumulative Project Conditions

AIR QUALITY

Exacerbate Regional Ozone and Particulate Matter Cumulative Emissions

Long-term (Cumulative) Increases of Criteria Air Pollutants

Long-Term (Cumulative) Increase in Greenhouse Gas Emissions

VISUAL RESOURCES/AESTHETICS

Degrade Existing Visual Character

On February 25, 2009, the City Council certified the Sheldon/99 GPA and Rezone EIR and adopted the associated Findings of Fact and Statement of Overriding Considerations regarding the significant and unavoidable environmental effects.

The proposed Project would not result in any new significant impacts or substantially increase the severity of any previously disclosed significant impacts.

4.4 PROJECT ALTERNATIVES

Pursuant to CEQA Guidelines Section 15126.6, project alternatives are developed to reduce or eliminate the significant or potentially significant adverse environmental effects identified as a result of the proposed Project, while still meeting most if not all of the basic Project objectives. An EIR *must* evaluate a reasonable range of alternatives to the proposed Project or to the location of the proposed Project that could 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 (CEQA Guidelines Section 15126.6). However, as discussed throughout this Draft SEIR, the proposed Project would not result in any new significant impacts or substantially increase the severity of any previously disclosed significant impacts.

The following objectives have been identified for the proposed Project:

- Provide a retail Project within one quarter to one half mile of a major freeway interchange.
- Maximize development potential for the Project.
- Provide a mix of retail/office uses that are the highest and best use for the Project location.
- Develop at a density that allows adequate parking and on-site circulation to serve proposed uses.

5.0 REPORT PREPARATION

4.0 OTHER CEQA CONSIDERATIONS

Because the proposed Project would not result in any new or substantially increase the severity of the significant impacts identified in the Sheldon/99 GPA and Rezone EIR, additional alternatives analysis is not required. However, the analysis below describes the alternatives analyzed in Section 6.0 of the Sheldon/99 GPA and Rezone EIR relative to the proposed Project. The Sheldon/99 GPA and Rezone EIR analyzed the following alternatives on the pages cited below:

- Alternative 1 – No Project Alternative (page 6.0-2)
- Alternative 2 – Reduced Residential Density Alternative (page 6.0-10)
- Alternative 3 – Open Space Alternative (page 6.0-19)
- Alternative 4 – Reduced Commercial Alternative (page 6.0-26)

4.4.1 ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(1) requires that a No Project Alternative be analyzed. The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the impacts of approving a Project with the impacts of not approving the Project. The No Project Alternative analysis is not the baseline for determining whether the environmental impacts of a proposed Project may be significant, unless the analysis is identical to the environmental setting analysis which does establish that baseline.

A No Project Alternative/No Development Alternative assumes that the proposed Project would not occur and there would be no development of the site. Under this scenario, there would be no impacts and the physical conditions on the site would be those described under the existing conditions in the technical sections of this Draft SEIR.

The No Project/No Action Alternative assumes development consistent with the existing land use and zoning designations on the Project site, which would allow for development under the existing High Density Residential and Commercial designations on the site. Thus, the No Project/No Action Alternative is development consistent with the land uses approved under the Sheldon/99 GPA and Rezone EIR. As discussed throughout Section 4.0, the impacts associated with development under the existing designations allowed under the Sheldon/99 GPA and Rezone EIR would be similar to those of the proposed Project. The No Project/No Action Alternative would not substantially reduce any significant and unavoidable environmental impacts compared to those of the proposed Project.

This alternative would allow for the development of some retail on the Project site, but the ability to develop commercial uses could be somewhat constrained with a portion of the site developed with residential use. Development of the commercial parcel under existing zoning would be generally consistent with the Project objectives, but developing residential use would be generally inconsistent with the Project objectives.

4.4.2 ALTERNATIVE 2 – REDUCED RESIDENTIAL DENSITY ALTERNATIVE

The Reduced Residential Density Alternative in the Sheldon/99 GPA and Rezone EIR assumed 11.85 acres of the Sheldon/99 GPA and Rezone area would be designated for medium-density residential (7.1 to 15.0 du/ac) land uses rather than the high-density residential land use designation. As discussed in Section 2.0 Project Description, the proposed Project would change the residential land use designation to a commercial designation, so the proposed Project

eliminates the residential land uses for the Project site. However, the elimination of the residential land uses would not reduce any of the significant and unavoidable impacts identified in the Sheldon/99 GPA and Rezone EIR to such a degree that they would be reduced to a less than significant level.

To the extent that this alternative would maintain the same acreage for commercial and residential uses under the existing land use designations, the density of the residential development would not affect the retail uses on site. Similar to the No Project Alternative, some retail development could occur on the commercially designated parcel, but residential use would somewhat constrain the ability to develop commercial uses on the remainder of the site. Development of the commercial parcel under existing zoning would be generally consistent with the Project objectives, but developing residential use would be generally inconsistent with the Project objectives.

4.4.3 ALTERNATIVE 3 – OPEN SPACE ALTERNATIVE

The Open Space Alternative in the Sheldon/99 GPA and Rezone EIR would have changed 7.81 acres of land northeast of the future East Stockton Boulevard, designated High Density Residential in the Sheldon/99 GPA and Rezone Project, to an Open Space designation. The Sheldon/99 GPA and Rezone EIR found that this alternative would reduce physical effects, but not necessarily to a less than significant level. The Open Space area included in this alternative is not part of the proposed Project site and would not reduce impacts of the proposed Project. An alternative that includes all or a portion of the proposed Project for Open Space would reduce impacts of the proposed Project, but because the proposed Project represents only 4.46 acres, it would be less than the Open Space assumed in the Sheldon/99 GPA and Rezone EIR and would not reduce the overall impacts identified in the Sheldon/99 GPA and Rezone EIR to a less than significant level.

Conversion of the Project site to Open Space would not be consistent with the Project objectives, which would entail development with commercial uses.

4.4.4 ALTERNATIVE 4 – REDUCED COMMERCIAL ALTERNATIVE

The Reduced Commercial Alternative analyzed in the Sheldon/99 GPA and Rezone EIR assumed a 10 percent reduction in the amount of commercial uses that would be developed in the Sheldon/99 GPA and Rezone area. The Sheldon/99 GPA and Rezone EIR found that there would be some reductions in the severity of traffic impacts and there would be associated reductions related to air quality and greenhouse gases, but these impacts would not be reduced to less than significant levels. As discussed in Section 2.0 Project Description, the Sheldon/99 GPA and Rezone EIR assumed a 0.35 floor area ratio (FAR; the ratio of building square footage to the area of the site) for commercial uses. The proposed Project has a FAR of 0.14 (27,430 square feet on a 4.46-acre [194,278-square-foot] site). Consequently, the proposed Project exceeds the reduction in commercial square footage assumed in the Reduced Commercial Alternative. However, as discussed throughout Section 4.0, this reduction does not reduce significant impacts identified in the Sheldon/99 GPA and Rezone EIR to a less than significant level.

This alternative could provide a retail Project within one quarter to one half mile of a major freeway interchange and could be developed at a density that allows for adequate parking and on-site circulation. However, a Reduced Commercial Alternative may be considered inconsistent with the objectives to maximize development potential for the Project and provide for the highest and best use for the Project location.

4.0 OTHER CEQA CONSIDERATIONS

4.4.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The Sheldon/99 GPA and Rezone EIR found that the Open Space Alternative would be the environmentally superior alternative. For the proposed Project, an alternative that designates all or a portion of the Project site for Open Space would reduce the intensity of development on the site and reduce the overall impacts of the Project. However, given the Project site's proximity to the Sheldon Road/State Route 99 Interchange, the Project site would be better suited for a more intense land use that would take advantage of existing traffic volumes and access.

REFERENCES

- Elk Grove, City of. 2009a. *City of Elk Grove General Plan*. Adopted November 2003; amended through July 22, 2009. Elk Grove, CA.
- . 2009b. *Sheldon/99 GPA and Rezone Environmental Impact Report* (SCH No. 2007122045). February 2009. Elk Grove, CA.
- . 2013. *Sheldon Moore Center Project Initial Study* (SCH No. 2012122013). April 2013. Elk Grove, CA.

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EXHIBIT B

**MOORE SHELDON RETAIL CENTER
PROJECT**
FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

SCH No. 2012122013



Prepared by:

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DECEMBER 2013

MOORE SHELDON RETAIL CENTER PROJECT
FINAL SUBSEQUENT
ENVIRONMENTAL IMPACT REPORT

SCH No. 2012122013

Prepared by:
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DECEMBER 2013

1.0 INTRODUCTION

1.1 PURPOSE AND BACKGROUND

This document contains public comments received on the Draft Subsequent Environmental Impact Report (Draft SEIR; SCH# 2012122013) for the Moore Sheldon Retail Center Project (Project). Written comments were received by the City of Elk Grove during the public comment period from September 20, 2013, through November 4, 2013. This Final SEIR includes written responses to environmental issues raised in comments on the Draft SEIR and to clarify and correct text in the Draft SEIR, as appropriate. Also included are text changes made at the initiative of the lead agency (City of Elk Grove). These changes do not alter the conclusions of the Draft SEIR. The Draft EIR is hereby incorporated by reference. This document has been prepared in accordance with the California Environmental Quality Act (CEQA; Public Resources Code Sections 21000–21177).

1.2 PROJECT UNDER REVIEW

PROJECT ANALYZED IN THE DRAFT EIR

The proposed Project would change the General Plan designation on the western parcel of the site from High Density Residential to Commercial, consistent with the eastern parcel of the site. The Project would also rezone the western parcel of the Project site from RD-20 (High Density Residential 20 du/ac) to General Commercial (GC) and the eastern parcel from Limited Commercial (LC) to GC. Development of the proposed Project uses would include the construction of approximately 27,430 square feet of commercial buildings on 4.46 acres, consisting of the following:

- An 1,800-square-foot office building located along Sheldon Road
- A gas station consisting of eight fuel dispensers under a canopy and associated underground fuel storage tanks adjacent to Sheldon Road
- A 13,409-square-foot building composed of the following:
 - a fast-food restaurant (4,100 square feet) with a drive-through located to the east
 - a convenience store associated with the gas station (6,554 square feet)
 - a deli shop (1,160 square feet)
 - a wine/liquor shop (720 square feet)
 - a yogurt shop (875 square feet)
- A 3,061-square-foot car wash
- A 4,580-square-foot restaurant
- A 4,580-square-foot building with a drive-through lane located on the northern border of the Project site
- A new masonry sound wall on the north end of the Project site beyond the drive-through lane
- Three patios

1.0 INTRODUCTION

- 109 parking spaces and bicycle parking
- On-site signage

The following objectives have been identified for the proposed Project:

- Provide a retail Project within one quarter to one half mile of a major freeway interchange.
- Maximize development potential for the Project.
- Provide a mix of retail/office uses that are the highest and best use for the Project location.
- Develop at a density that allows adequate parking and on-site circulation to serve proposed uses.

1.3 TYPE OF DOCUMENT

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. As described in CEQA Guidelines Section 15162(a), "when an EIR has been certified no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, that substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects." The Draft SEIR has been prepared as a Subsequent EIR (SEIR) to the Sheldon/99 GPA and Rezone EIR, pursuant to CEQA Guidelines Section 15162. The City determined that because the proposed Project requests changes to land uses previously analyzed for environmental effects in the Sheldon/99 GPA and Rezone EIR, an SEIR was necessary for the proposed Project.

The analysis associated with an SEIR focuses on substantial changes proposed in a project that require major revisions of a previous EIR due to either the identification of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

The Sheldon/99 GPA and Rezone EIR is a program EIR, which is an EIR prepared for a series of actions that can be characterized as one large project and are related. A program EIR, such as the Sheldon/99 GPA and Rezone EIR, is appropriate for land use decision-making at a broad level that contemplates further, site-specific review of individual development proposals. According to CEQA Guidelines Section 15168(d), a program EIR can be used to simplify the task of preparing environmental documents on later parts of the program.

The Sheldon/99 GPA and Rezone EIR assessed the environmental impacts resulting from the construction and operation of the Sheldon/99 GPA and Rezone Project and identified mitigation measures to minimize potential adverse environmental impacts.

The SEIR provides an analysis of environmental effects specifically associated with the proposed Project, in light of the environmental analysis provided in the Sheldon/99 GPA and Rezone EIR. Consistent with CEQA Guidelines Section 15162, the SEIR addresses environmental effects that are particular to the Project and utilizes mitigation measures, which are based on adopted

Sheldon/99 GPA and Rezone Project development policies and standards, to mitigate anticipated impacts.

The SEIR will be used by the City as a tool in evaluating the environmental impacts of the proposed Project. As the lead agency under the provisions of CEQA, the City of Elk Grove has discretionary approval authority and the responsibility to consider the environmental effects of the Project. The SEIR is intended to evaluate the environmental impacts of the Project to the greatest extent possible. The SEIR will be used as the primary environmental document to evaluate all planning and permitting actions associated with the Project, which may include, but are not limited to, the following:

- Approval of an amendment to the General Plan to change the land use designation of parcel 115-0150-064 from High Density Residential (HDR) to Commercial
- A Rezone to change parcel 115-0150-064 (approximately 2.58 acres) from a zoning of RD-20 (High Density Residential 20 dwelling units per acre [du/ac]) to a zoning of General Commercial (GC) and to change parcel 115-0150-067 (approximately 1.88 acres) from a zoning of Limited Commercial (LC) to General Commercial (GC)
- Approval of a Tentative Parcel Map to subdivide the two properties into five parcels
- Approval of a Conditional Use Permit to allow the operation of a drive-through restaurant and service station
- Design Review for the construction of commercial uses on the Project site

1.4 RELATIONSHIP TO THE CITY OF ELK GROVE GENERAL PLAN AND SHELDON 99/ GPA AND REZONE PROJECT

GENERAL PLAN

The City adopted the City of Elk Grove General Plan (General Plan) in November 2003. The General Plan is the City's overall guide for the use of the City's resources, expresses the development goals of the community, and is the foundation upon which all land use decisions are made. The General Plan EIR (SCH# 2002062082) analyzed the environmental impacts associated with buildout of the City under the land uses and densities allowed by the General Plan. Where feasible, the City has adopted mitigation measures to reduce impacts to an acceptable level of significance. In addition, significant and unavoidable impacts identified in the General Plan EIR were addressed by the City in the General Plan EIR, and a Statement of Overriding Considerations was adopted with the approval of the General Plan EIR.

The Project site is currently designated High Density Residential and Commercial in the General Plan. The proposed Project requests a General Plan amendment to change the High Density Residential land use designation to Commercial.

SHELDON/99 GPA AND REZONE PROJECT

The Project area is also included as part of the Sheldon/99 GPA and Rezone Project area and was examined under the Sheldon/99 GPA and Rezone EIR (SCH No. 2007122045), certified February 2009. The Sheldon/99 GPA and Rezone Project was initiated by the Elk Grove City Council in August 2006, after a citywide office and retail analysis indicated that the Sheldon

1.0 INTRODUCTION

Road/SR 99 Interchange Reconstruction project, which was approved in 2005, would cause several parcels east of the Sheldon Road/SR 99 interchange to have increased commercial potential as a result of the interchange improvements and realignment of East Stockton Boulevard. The proposed Project is subject to the adopted mitigation measures described in the Mitigation Monitoring and Reporting Program (MMRP) for the Sheldon/99 GPA and Rezone EIR.

Sections 3.1 through 3.5 in the Draft SEIR provide the setting, environmental impacts, and mitigation measures for each of the environmental issue areas addressed. Potential effects of implementing the proposed Project are identified, including cumulative effects, along with mitigation measures recommended to reduce identified impacts. The SEIR provides an analysis of environmental effects specifically associated with the proposed Project and compares the significance findings to those found in the Sheldon/99 GPA and Rezone Project EIR. Consistent with CEQA Guidelines Section 15162, this EIR focuses on changes in the Project that require major revisions to the previous EIR due to the involvement of potentially new significant environmental effects or a substantial increase in the severity of previously identified significant effects. The SEIR utilizes mitigation measures adopted as part of the Sheldon/99 GPA and Rezone Project EIR, which are based on adopted City development policies and standards to mitigate anticipated impacts.

Cumulative environmental effects of the Project are generally based on information provided in the Sheldon/99 GPA and Rezone Project EIR, with identification of the Project's contribution to the cumulative condition and updated information on the cumulative setting based on currently approved and proposed development projects in the City.

1.5 ORGANIZATION OF THIS DOCUMENT

For this Final SEIR, comments and responses are grouped by comment letter. The comments and responses that make up the Final SEIR, in conjunction with the Draft SEIR, as amended by the text changes, constitute the EIR that will be considered for certification by the City of Elk Grove.

The Final SEIR is organized as follows:

Section 1.0 – Introduction: This section includes a summary of the Project description and the process and requirements of a Final EIR.

Section 2.0 – Errata: This section lists the text changes to the Draft SEIR.

Section 3.0 – List of Agencies and Persons Commenting: This section contains a list of all of the agencies or persons who submitted comments on the Draft SEIR during the public review period.

Section 4.0 – Comments and Responses: This section contains the comment letters received on the Draft SEIR and the corresponding response to each comment. Each letter and each comment in a letter has been given a number. Responses are provided after the letter in the order in which the comments appear. Where appropriate, responses are cross-referenced between letters. The responses following each comment letter are intended to supplement, clarify, or amend information provided in the Draft SEIR or refer the commenter to the appropriate place in the document where the requested information can be found. Those comments not directly related to environmental issues may be discussed or noted for the record.

1.6 PUBLIC PARTICIPATION AND REVIEW PROCESS

The City of Elk Grove notified all responsible and trustee agencies and interested groups, organizations, and individuals that the Draft SEIR on the proposed Project was available for review. The following list of actions took place during the preparation, distribution, and review of the Draft SEIR:

NOTICE OF PREPARATION AND INITIAL STUDY

In accordance with CEQA regulations, the City released a Notice of Preparation (NOP) on April 19, 2013, with a comment period from April 19, 2013, to May 9, 2013. The City distributed the NOP to responsible agencies, interested parties, and organizations, as well as to private organizations and individuals that have stated an interest in the Project. The purpose of the NOP was to provide notification that an EIR for the Project was being prepared and to solicit guidance on the scope and content of the document. A copy of the NOP and public and agency responses to the NOP are included in Appendix B of the Draft SEIR in accordance with CEQA. The City held a scoping meeting on May 9, 2013. There were no public or agency comments submitted at the scoping meeting.

The Draft SEIR was circulated for public review and comment for a period of 45 days from September 20, 2013, through November 4, 2013. A public hearing was held on the Draft SEIR for this Project on October 17, 2013.

Copies of the Draft SEIR were available for review at the following locations:

- City of Elk Grove City Hall, Planning Division, 8401 Laguna Palms Way
- Elk Grove Branch of the Sacramento Public Library at 8962 Elk Grove Boulevard
- The City's Planning Department website at www.egplanning.org/environmental/

2.0 ERRATA

2.1 INTRODUCTION

This chapter presents minor corrections and revisions made to the Draft SEIR initiated by the lead agency based on its ongoing review. Revisions herein do not result in new significant environmental impacts, do not constitute significant new information, and do not alter the conclusions of the environmental analysis. New text is indicated in underline, and text to be deleted is reflected by a strikethrough unless otherwise noted in the introduction preceding the text change. Text changes are presented in the page order in which they appear in the Draft EIR.

2.2 CHANGES AND EDITS TO THE DRAFT EIR**1.0 INTRODUCTION**

No changes were made to this section.

2.0 PROJECT DESCRIPTION

No changes were made to this section.

3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

No changes were made to this section.

3.1 VISUAL RESOURCES/AESTHETICS

No changes were made to this section.

3.2 AIR QUALITY

No changes were made to this section.

3.3 GREENHOUSE GASES AND CLIMATE CHANGE

No changes were made to this section.

3.4 NOISE

The applicant requested that fuel deliveries be permitted outside of the hours stated in mitigation measure MM 3.4.2, noting that circulation for fuel trucks would not be hindered after these hours and that it is more efficient to have fuel deliveries occur when there is less potential for on-site congestion. The applicant also noted that fuel trucks shut down their engines when delivering fuel and that fuel is delivered via gravity (the fuel freely flows from the truck to the below-ground tanks), rather than a pump. Based on the location of the underground fuel storage near the southwest corner of the Project site, fuel delivery trucks would pass approximately 112 feet (at the proposed driveway on Sheldon Road) from the nearest residential property line to the east. It is likely that fuel trucks would enter the site from East Stockton Boulevard and exit via the driveway on Sheldon Road, but it is conservatively assumed that there would be two passbys at the Sheldon Road driveway. Based upon this distance and two truck passbys, the hourly noise level is estimated to be 43.2 dB Leq, not accounting for the

2.0 ERRATA

masonry wall, or approximately 38 dB Leq with the wall.¹ Therefore, fuel deliveries would not exceed the City's 45 dB Leq nighttime noise level standard. With implementation of Mitigation Measure MM 3.4.2, the impact identified in the Draft SEIR would still be reduced to less than significant. The text on page 3.4-16 is revised as follows:

MM 3.4.2 The following noise reduction methods shall be incorporated into the Project design to reduce noise levels and achieve compliance with the City's exterior noise level limits.

- An 8-foot-tall sound wall, constructed with rough, split-face concrete block, shall be constructed along the north property line of the Project site.
- Loading and delivery activities which require the use of semi-trucks shall be limited to daytime (7:00AM to 10:00PM) hours, with the exception of gasoline deliveries, which shall be required to shut down truck engines and fill tanks using only gravity.
- Individual vacuums shall be limited to a maximum sound level of 72 dBA at a distance of 10 feet.
- Car wash and vacuum stations shall be limited to daytime (7:00AM to 10:00PM) hours only.
- Rooftop mechanical equipment shall be shielded from view by building parapets and/or rooftop mechanical screen barriers.
- The City Planning Department will confirm these measures are incorporated into the design prior to issuance of building permits.

3.5 TRAFFIC AND CIRCULATION

The Draft SEIR identified the proposed project's contribution to the cumulative congestion at the Sheldon Road/East Stockton Boulevard intersection was potentially cumulatively considerable. The mitigation identified to reduce the impact was payment of fair share fees toward the improvement at the intersection and also included a requirement for the timing of the improvement. However, because the Project applicant has no control over the timing of construction of the improvements at the Sheldon Road/East Stockton Boulevard intersection, this portion of the mitigation has been removed. CEQA states that a "project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact." (CEQA Guidelines Section 15130(a)(3).) Therefore, payment of fees toward the improvement adequately mitigates the Project's contribution to the cumulative impact. The text on page 3.5-26 is revised as follows:

¹ Saxelby, Luke, INCE Bd. Cert., for J.C. Brennan & Associates, Inc., personal communication November 21, 2013.

MM 3.5.3 The Project applicant shall pay a fair-share contribution toward the installation of a right-turn overlap phase on the southbound approach to the Sheldon Road/East Stockton Boulevard intersection.

Payment of the fee shall be collected prior to issuance of building permit.
~~Roadway improvements shall be constructed prior to issuance of final occupancy.~~

4.0 OTHER CEQA CONSIDERATIONS

No changes were made to this section.

5.0 REPORT PREPARERS

No changes were made to this section.

3.0 LIST OF COMMENTERS

3.0 LIST OF AGENCIES AND PERSONS COMMENTING

3.1 LIST OF COMMENTERS

The following individuals and representatives of organizations and agencies submitted comments on the Draft EIR:

TABLE 3.1
LIST OF COMMENTERS ON THE DRAFT SEIR

Letter	Individual or Signatory	Affiliation	Date
A	Joseph Camacho	Sacramento-Yolo Mosquito and Vector Control District	October 31, 2013
B	Trevor Cleak	Central Valley Regional Water Quality Control Board	October 3, 2013
1	Sarah Johnson	Resident	September 21, 2013

4.0 COMMENTS AND RESPONSES

4.0 COMMENTS AND RESPONSES

4.1 REQUIREMENTS FOR RESPONDING TO COMMENTS ON A DRAFT EIR

CEQA Guidelines Section 15088 requires the lead agency to evaluate all comments on environmental issues received on the Draft Subsequent Environmental Impact Report (SEIR) and prepare a written response. The written response must address the significant environmental issue raised and must 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 comment, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Section 15204).

CEQA Guidelines Section 15204 recommends that commenters provide detailed comments that focus on the sufficiency of the Draft SEIR in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. CEQA Guidelines Section 15204 also notes that commenters should provide an explanation and 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 where the response to comments results in revisions to the Draft SEIR, those revisions be noted as a revision to the Draft SEIR or in a separate section of the Final SEIR.

4.2 COMMENTS RECEIVED AT THE HEARING FOR THE DRAFT SEIR

The City of Elk Grove Planning Commission held a public hearing on the Draft SEIR for the Project on October 17, 2013. One member of the public commented at the hearing regarding the location of a planned bicycle trail in the vicinity of the Project site, but raised no issues regarding the adequacy of the Draft SEIR.

4.3 RESPONSES TO COMMENT LETTERS

Written comments on the Draft SEIR 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:

Public agency comment letters are coded by letters and each issue raised in the comment letter is assigned a number (e.g., Comment Letter A, comment 1: A-1).

Individual and interest group comment letters are coded by numbers and each issue raised in the comment letter is assigned a number (e.g., Comment Letter 1, comment 1: 1-1). Note that no comment letters were received from any individuals or interest groups.

Where changes to the Draft SEIR text result from responding to comments, those changes are included in the response and demarcated with revision marks (underline for new text, ~~strikeout~~ for deleted text). Comment-initiated text revisions to the Draft SEIR and minor staff-initiated changes are also provided and are demarcated with revision marks in Section 2.0, Errata, of this Final SEIR.

SACRAMENTO-YOLO
MOSQUITO
& VECTOR
CONTROL
DISTRICT

Letter A

MAILING ADDRESS
SACRAMENTO COUNTY
8931 BOND ROAD
ELK GROVE CA 95624

YOLO COUNTY
1234 FOFINA AVENUE
WOODLAND CA 95695

1.800.429.1022
FIGHTtheBITE.net

City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758
Attn: Adam Petersen

October 31, 2013

Re: Moore Sheldon Center, File #EG-11-033

The Sacramento-Yolo Mosquito and Vector Control District (District) appreciates the opportunity to review and comment on the Draft Subsequent Environmental Impact Report for the Moore Sheldon Center project.

The Sacramento - Yolo Mosquito and Abatement District mission is "To provide safe, effective and economical mosquito and vector control for Sacramento and Yolo counties". As a District we promote cooperation and communication with property owners, residents, social and political groups as well as other governmental agencies to help in these efforts. Our ultimate goal is to protect public health and welfare from diseases transmitted by mosquitoes such as West Nile virus, Western Equine Encephalitis, canine heartworm, malaria and others.

Any policy, practice, or design criteria for aquatic sites including but not limited to; hydro-modification, low impact development (LID), and stormwater retention plans must explicitly recognize the obligations imposed on land-owners and managers by the California Health and Safety Code (sec. 2000 et. seq.) to avoid creating public health threats through the establishment or maintenance of mosquito and other vector breeding habitats that can impact public health and welfare.

The District has designed and made available a Mosquito Reducing Best Management Practices (BMP) Manual for design and maintenance guidelines for storm water and drainage systems. This BMP Manual is available for download at www.fightthebite.net/physical-control.

Please include Mosquito Reducing BMPs as a control function within the stormwater BMPs and other drainage facilities as outlined in Mitigation Measure 4.8.2c of Appendix A – Mitigation Monitoring and Reporting Program. If implemented the resulting construction of detention basins and biofilter swales could breed mosquitoes if not properly designed or maintained resulting in an adverse effect on public health. Include the District in subsequent storm drain and drainage plan review prior to project approval.

A-1

PROVIDING SAFE, EFFECTIVE AND ECONOMICAL MOSQUITO AND VECTOR CONTROL

Letter A Continued

Failure to address these issues and potential mosquito breeding sources during the planning and construction process may result in enforcement actions to the landowner after the project has been completed. The District has the authority to abate a public nuisance as defined in the California Health and Safety Code (HSC) Section § 2010 and may pursue enforcement actions pursuant to Sections § 2060 of the (HSC) which can involve civil fines of up to \$1000/per day.

A-1
cont.

Should you have any questions or concerns please feel free to contact the Ecological Management Supervisor, Marty Scholl at (916) 405-2085.

Sincerely,



Joseph Camacho
Ecological Management Department
Sacramento Yolo Mosquito and Vector Control District
jcamacho@FightTheBite.net

Cc: Marty Scholl

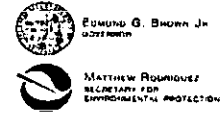
Letter A – Joseph Camacho, Sacramento-Yolo Mosquito and Vector Control District

Response A-1 The comment describes the Sacramento-Yolo Mosquito and Vector Control District's mission and requirements for development to minimize the potential for mosquito breeding sources on the property. The comment also requests the use of mosquito reducing best management practices (BMPs) in the stormwater BMPs and drainage facilities that are described in Mitigation Measure 4.8.2c in Appendix A, which is the Mitigation Monitoring and Reporting Program (MMRP) for the Sheldon/99 RPA EIR.

The Project will comply with all existing regulations regarding design features to reduce potential mosquito breeding sources. The Project does not propose any changes to stormwater and drainage facilities that were evaluated in the Sheldon/99 RPA EIR and would not develop any major drainage facilities or drainage basins that would provide mosquito breeding habitat. The comment is noted, and no changes to the text of the SEIR are necessary.



Letter B



Central Valley Regional Water Quality Control Board

3 October 2013

Christopher Jordan
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

CERTIFIED MAIL
7013 1090 0001 3130 4377

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT, MOORE SHELDON CENTER PROJECT, SCH NO. 2012122013, SACRAMENTO COUNTY

Pursuant to the State Clearinghouse's 20 September 2013 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Subsequent Environmental Impact Report* for the Moore Sheldon Center 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.

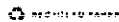
Construction Storm Water General Permit

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).

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.

B-1

KARL E. LONDLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER
11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley



Letter B Continued

Moore Sheldon Center Project
Sacramento County

- 2 -

3 October 2013

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits¹

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

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.

**B-1
cont.**

Letter B Continued

Moore Sheldon Center Project
Sacramento County

- 3 -

3 October 2013

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.

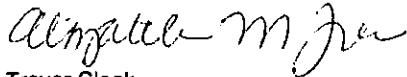
Waste Discharge Requirements

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.

If you have questions regarding these comments, please contact me at (916) 464-4684 or tcleak@waterboards.ca.gov.



for Trevor Cleak
Environmental Scientist

B-1
cont.

cc: State Clearinghouse Unit, Governor's Office of Planning and Research, Sacramento

Letter B – Trevor Cleak, Central Valley Regional Water Quality Control Board

Response B-1 The comment refers to some requirements with which the Project would be required to comply, if applicable, including the Construction Storm Water General Permit, Municipal Separate Storm Sewer System (MS4) Permits, Industrial Storm Water General Permit, Clean Water Act Section 401 and 404 permits, and Waste Discharge Requirements. Construction activities on-site are regulated by the City's NPDES General Construction Permit for Discharges of Storm Water Runoff, provided that the total amount of ground disturbance during construction occurs on one acre or more. These requirements would apply to the proposed Project because it would involve ground disturbance on more than 1 acre. The Project would be required to comply with the City's Storm Drainage Master Plan, which is designed to be in compliance with the MS4 permit. The Project is not an industrial use and would not be subject to the Industrial Storm Water General Permit. The comment provides information regarding discharge of dredge or fill materials in waters of the United States. Because the Project site has been significantly altered due to past and current activities, including agricultural use, there is no evidence of wetlands or Waters of the U.S. on the site. The Project would not be subject to Clean Water Act Section 401 and 404 permits or Waste Discharge Requirements.

Letter 1

From: Sarah Johnson <sjohnson@surewest.net>
Sent: Saturday, September 21, 2013 6:22 AM
To: Christopher Jordan
Subject: Moore Sheldon Retail Center

RE: Moore Sheldon Retail Center - # EG 11-033

The location of the fast food drive thru on the east side of the project is the worst possible location, in my opinion. This will site it right next to residential properties to the east. It should be located as far away from these as possible.

The first home we ever owned had a drive thru lane behind our back fence and the noise and the fumes from the vehicles inhibited our use of our backyard and caused us to eventually move, even though we loved living there.

The drive thru should be on the west side of the entire project in order to minimize these impacts.

Sincerely,
Sarah Johnson

1-1

Letter 1 – Sarah Johnson

Response 1-1 The comment expresses concern regarding noise and exhaust from the drive-through on the north portion of the site, based on the commenter's experience at a former residence near an unrelated project with a drive-through. The analysis in the Draft SEIR considers the location of the drive-through, relative to the future residential land use to the north. As shown in Table 3.4.5 on Draft SEIR page 3.4-16, with an 8-foot soundwall required by mitigation measure MM 3.4.2, the noise levels from the drive-through on the northern portion of the site would be 42 dBA L_{eq} during the day. This is less than the existing ambient noise level, which exceeded 50 dBA L_{eq} due to the site's proximity to the freeway (DSEIR page 3.4-9). Pursuant to Elk Grove Municipal Code Section 23.78.030(D), the drive-through would not be open in the nighttime hours (10:00PM to 7:00AM), so it would not generate noise during these sensitive hours.

Regarding car exhaust, carbon monoxide is the primary mobile-source criteria pollutant of local concern. As discussed on Draft SEIR pages 3.2-17 and -18, concentrations of carbon monoxide are a direct function of the number of vehicles, length of delay, and traffic flow conditions. The Draft SEIR used the Sacramento Metropolitan Air Quality Management District's (SMAQMD) tiered project-level screening procedure, which is based on vehicles per hour on busy roadways, to determine whether detailed carbon monoxide hotspot modeling is required for a proposed development project. Based on the number of trips on adjacent roads, carbon monoxide hotspot modeling was not required. As discussed on Draft SEIR page 3.2-18, the SMAQMD deems an intersection with more than 31,600 vehicles per hour as a risk due to increased carbon monoxide levels. As noted in the Draft SEIR, the Sheldon Road/East Stockton Boulevard intersection would accommodate 5,771 vehicles during the PM peak hour and 5,887 vehicles at the AM peak hour under cumulative conditions. This volume of vehicles is substantially less than the SMAQMD's threshold for requiring carbon monoxide hotspot modeling and was therefore considered a less than significant cumulative impact. The traffic analysis projected a maximum of 279 peak-hour trips from the coffee shop in the AM peak hour (Draft SEIR Table 3.5-4, page 3.5-11). This is also substantially less than the SMAQMD threshold for requiring carbon monoxide hotspot modeling. Therefore, the potential for carbon monoxide impacts due to drive-through traffic would also be less than significant.

Exhibit C

FINDINGS REQUIRED UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (Public Resources Code Section 21000 et seq.)

For the Moore Sheldon Retail Center Project EG-11-033

I. INTRODUCTION

The City of Elk Grove ("City") prepared a Final Subsequent Environmental Impact Report ("Final SEIR") for the proposed Moore Sheldon Retail Center Project ("Project") and other related entitlements including a General Plan Amendment, Rezone, Tentative Parcel Map, Conditional Use Permit, and Design Review.

The Final SEIR addresses the potential environmental effects associated with the development of the Project site with approximately 27,430 square feet of commercial buildings on a 4.46-acre site located at the northeast corner of intersection of Sheldon Road and East Stockton Boulevard. The Project includes the construction of:

- An 1,800-square-foot office building located along Sheldon Road
- Gas station consisting of eight fuel dispensers under a canopy and associated underground fuel storage tanks adjacent to Sheldon Road
- A 13,409-square-foot building composed of the following:
 - a fast food restaurant (4,100 square feet) with a drive-through located to the east
 - a convenience store associated with the gas station (6,554 square feet)
 - a deli shop (1,160 square feet)
 - a wine/liquor shop (720 square feet)
 - a yogurt shop (875 square feet)
- A 3,061-square-foot car wash
- A 4,580-square-foot restaurant
- A 4,580-square-foot building with a drive-through lane located on the northern border of the Project site
- A new masonry sound wall on the north end of the Project site beyond the drive-through lane
- Three patios
- 109 parking spaces and bicycle parking
- On-site signage

The Project Applicant is requesting a conditional use permit to allow the operation of a drive-through restaurant and service station.

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 the California Environmental Quality Act ("CEQA") (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.) relating to the Project. The Findings provide the written analysis and conclusions of this Council regarding the Project's environmental impacts, mitigation measures, alternatives to the Project, and the overriding considerations, which in this Council's view, justify approval of the Moore Sheldon Retail Center Project, despite its environmental effects.

II. GENERAL FINDINGS AND OVERVIEW

A. Relationship to the City of Elk Grove General Plan and the Sheldon/99 GPA and Rezone Project

The General Plan provides the long-term vision or blueprint for development of the City; all subsequent land use approvals are required to be consistent with the goals, objectives, and policies embodied in the General Plan. The Moore Sheldon Retail Center Project consists of two parcels designated in the City's General Plan for Commercial and High Density Residential. The proposed Moore Sheldon Retail Center Project an amendment to the General Plan to change the land use designation of parcel 115-0150-064 from High Density Residential (HDR) to Commercial. The Moore Sheldon Retail Center Project SEIR analyzes the physical effects of that proposed General Plan Amendment.

Development of the subject parcels was analyzed in the Sheldon/99 GPA and Rezone Project EIR. The proposed Moore Sheldon Retail Center Project is subject to the adopted mitigation measures described in the Mitigation Monitoring and Reporting Program (MMRP) for the Sheldon/99 GPA and Rezone Project EIR.

B. Procedural Background

The City prepared a Notice of Preparation (NOP) on April 19, 2013, stating that an EIR for the Project would be prepared. This notice was circulated to the public, local, state, and federal agencies, and other interested parties to solicit comments on the Project. Concerns raised in response to the NOP were considered during preparation of the Draft Subsequent Environmental Impact Report (referred to as the "Draft SEIR" or the "DSEIR"). The Notice of Availability for the DSEIR was published on September 20, 2013. The DSEIR was published for public review and comment on September 20, 2013, and was filed with the State Office of Planning & Research under State Clearinghouse No. 2012122013. The review period for the DSEIR ended on November 4, 2013.

The City prepared written responses to the comments received during the comment period and included these responses in a separate volume entitled "Moore Sheldon Retail Center Project Final Subsequent Environmental Impact Report." The Final SEIR provides a list of those who commented on the DSEIR, copies of written comments (coded for reference), written responses to comments regarding the environmental review, and an errata with minor text changes made to the DSEIR as a result of comments on the DSEIR. The Final SEIR was made available for public review on December 6, 2013.

C. Project History

The Project area includes two parcels that are part of the Sheldon/99 GPA and Rezone Project area. Development of the Sheldon/99 GPA and Rezone Project area was examined under the Sheldon/99 GPA and Rezone Project EIR and certified in February 2009 (SCH No. 2007122045). The Sheldon/99 GPA and Rezone Project was initiated by the Elk Grove City Council in August 2006, after a Citywide office and retail analysis indicated that the Sheldon Road/SR 99 Interchange Reconstruction Project, which was approved in 2005, would cause several parcels east of the Sheldon Road/SR 99 Interchange to have increased commercial potential as a result of the interchange improvements and realignment of East Stockton Boulevard.

The Sheldon/99 GPA and Rezone EIR analyzed development of the two subject parcels for high-density residential use. After preparation of the EIR, but prior to EIR certification and approval of the Sheldon/99 GPA and Rezone Project, the designation of parcel 115-0150-067 was changed to a Commercial designation, consistent with a conditional use permit approved in 2007 for a commercial use on that parcel. The City Council considered that change of land use and determined that there would be no additional impact related to a change from residential to commercial at that site. With a residential use or a commercial use on parcel 115-0150-067, there would be adjacency and an interaction of residential use with commercial use; the only difference is the location of the boundary. Upon approving the Sheldon/99 GPA and Rezone Project, the City adopted Findings of Fact and a Statement of Overriding Considerations for the Sheldon/99 GPA and Rezone EIR for the identified significant and unavoidable impacts, which considered parcel 115-0150-064 with an HDR designation and parcel 115-0150-067 with a Commercial designation. The certified EIR was not challenged on that point.

The Sheldon/99 GPA and Rezone EIR identified the following significant and unavoidable impacts:

Traffic and Circulation

- Decline in Intersection Operations under Existing Plus Project Conditions
- Decline in Intersection Operations under Existing Plus Cumulative Project Conditions
- Decline in Roadway Operations under Existing Plus Cumulative Project Conditions

Air Quality

- Exacerbate Regional Ozone and Particulate Matter Cumulative Emissions
- Long-term (Cumulative) Increases of Criteria Air Pollutants
- Long-Term (Cumulative) Increase in Greenhouse Gas Emissions

Visual Resources/Aesthetics

- Degrade Existing Visual Character

D. Record of Proceedings and Custodian of Record

For purposes of CEQA and the findings set forth herein, the record of proceedings for the City of Elk Grove's findings and determinations consists of the following documents and testimony, at a minimum:

- The NOP, comments received on the NOP, and all other public notices issued by the City in relation to the Moore Sheldon Retail Center Project SEIR (e.g., Notice of Availability).
- The 2003 General Plan Draft EIR, associated appendices to the Draft EIR, and technical materials cited in the Draft EIR.
- The 2003 General Plan Final EIR, associated appendices to the Final EIR, and technical materials cited in the Final EIR
- The Sheldon/99 GPA and Rezone Project Draft EIR, associated appendices to the Draft EIR, and technical materials cited in the Draft EIR.

- The Sheldon/99 GPA and Rezone Project Final EIR, including comment letters, and technical materials cited in the document.
- The Moore Sheldon Retail Center Project Draft SEIR, associated appendices to the Draft SEIR, and technical materials cited in the Draft SEIR.
- The Moore Sheldon Retail Center Project Final SEIR, including comment letters, and technical materials cited in the document.
- All non-draft and/or non-confidential reports and memoranda prepared by the City of Elk Grove and consultants related to the Project or any of the above-associated environmental documents.
- Minutes and transcripts of the discussions regarding the Project and/or Project components at public hearings held by the City of Elk Grove Planning Commission and City Council.
- Staff reports associated with Planning Commission and City Council meetings on the Project.
- Those categories of materials identified in Public Resources Code Section 21167.6.

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 offices located at 8401 Laguna Palms Way, Elk Grove, California, 95758.

E. Consideration of the Environmental Impact Report

In adopting these Findings, the City Council finds that the Final SEIR 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 Moore Sheldon Retail Center Project, including the General Plan Amendment, Rezone, Tentative Parcel Map, Conditional Use Permit, and Design Review. By these findings, the Council ratifies, adopts, and incorporates the analysis, explanations, findings, responses to comments, and conclusions of the Final SEIR. The City Council finds that the Final SEIR was completed in compliance with the California Environmental Quality Act. The Final SEIR represents the independent judgment of the City.

F. 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 Moore Sheldon Retail Center Project, shall continue in full force and effect unless amended or modified by the City.

G. Summary of Environmental Findings

The City Council has determined that based on all of the evidence presented, including, but not limited to, the SEIR, written and oral testimony given at meetings and hearings, and submission of comments from the public, organizations, and regulatory agencies, and the responses prepared to the public comments, the following environmental impacts associated with the Project are:

- 1. Potentially Significant Impacts That Can be Avoided or Reduced to a Less Than Significant Level Through Implementation of Mitigation Measures Identified in the Moore Sheldon Retail Center SEIR**
 - Potential conflicts with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases

- Potential exposure of noise-sensitive land uses to noise levels that exceed the City's noise standards
- Contribution to the decrease of operations at various intersections, roadway segments, and freeway facilities under Cumulative Plus Project conditions

2. Impacts Addressed Adequately in the Previously Certified Sheldon/99 GPA and Rezone Project

- Effects on scenic vistas and scenic resources; changes to visual character; and increases in light or glare
- Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; conflicts with agricultural zoning or a Williamson Act contract
- Conflicts with zoning for forestland; conversion of forestland to non-forest use
- Conflicts with applicable air quality plans; violations of air quality standards or contributions to violations; increases in criteria pollutants; construction-related emissions; exposure of people to substantial pollutant concentrations or odors
- Effects on special-status species, riparian habitat or sensitive natural communities, wetlands, or migratory fish or wildlife species Conflicts with an adopted habitat conservation plan or natural community conservation plan
- Adverse effects on paleontological resources
- Adverse effects on historical resources; adverse effects on archaeological resources; disturbance of human remains
- Exposure to hazards related to rupture of a known earthquake fault, seismic ground shaking, seismic-related ground failure, liquefaction, soil erosion, unstable soils, or expansive soils
- Hazards associated with air traffic and cumulative contribution to air traffic
- Significant risk of loss, injury, or death involving wildland fires
- Exposure of the public, including schools, to hazardous materials through routine use or due to accident or upset, or due to being located on a listed hazardous site
- Violations of water quality standards
- Effects related to septic tanks or alternative wastewater disposal systems
- Effects on groundwater supplies or groundwater recharge; erosion, siltation, or flooding due to alteration of drainage patterns; polluted runoff
- Placement of housing or structures in a 100-year floodplain
- Exposure to risk due to inundation by seiche, tsunami, or mudflow, or failure of a levee or dam
- Conflicts with land use plans or policies

- Physically dividing a community
- Exposure of sensitive receptors to construction noise, construction vibration, or traffic noise
- Loss of mineral resources or loss of a mineral recovery site
- Displacement of housing or people
- Inducement of population growth
- Adverse effects associated with the construction of new or altered governmental facilities for fire protection, police protection, schools, parks, or other public facilities
- Deterioration of park or recreation facilities
- Conflicts with measures established for the performance of the circulation system, public transit, bicycle, or pedestrian facilities, or applicable congestion management program
- Changes in air traffic patterns
- Increases in traffic hazards or effects on emergency access or an adopted emergency response plan or emergency evacuation plan
- Exceeding wastewater treatment requirements or the capacity of the wastewater treatment provider
- Requirements for new or expanded water, wastewater, or stormwater facilities
- Effects related to solid waste
- Impacts related to water supply

III. FINDINGS AND RECOMMENDATIONS REGARDING SIGNIFICANT AND UNAVOIDABLE IMPACTS

1. **The Sheldon/99 GPA and Rezone EIR identified the following significant and unavoidable impacts:**

Traffic and Circulation

Decline in Intersection Operations under Existing Plus Project Conditions

Decline in Intersection Operations under Existing Plus Cumulative Project Conditions

Decline in Roadway Operations under Existing Plus Cumulative Project Conditions

Air Quality

Exacerbate Regional Ozone and Particulate Matter Cumulative Emissions

Long-term (Cumulative) Increases of Criteria Air Pollutants

Long-Term (Cumulative) Increase in Greenhouse Gas Emissions

Visual Resources/Aesthetics

Degrade Existing Visual Character

The proposed Moore Sheldon Retail Center Project would contribute to these impacts, but would not substantially increase the severity of the impacts as identified in the Sheldon/99 GPA and Rezone Project EIR. The proposed Moore Sheldon Retail Center Project would be required to implement all applicable mitigation measures identified in the Sheldon/99 GPA and Rezone Project Mitigation Monitoring and Reporting Program.

In February 2009, the Elk Grove City Council adopted a mitigation Monitoring and Reporting Program and Findings of Fact and a Statement of Overriding Considerations for the Sheldon/99 GPA and Rezone Project EIR for the significant and unavoidable impacts identified above.

IV. Findings and Recommendations Regarding Significant Impacts Which Are Avoided or Mitigated to a Less Than Significant Level

A. Greenhouse Gases and Climate Change

1. Greenhouse Gas Emissions Impacts (SEIR Impact 3.3.1)

(a) Potential Impact. The proposed Project will generate 2,296 metric tons of CO₂e annually, but the Project would not lead to an intensification of uses beyond those currently allowed under the Zoning Code and General Plan, the Project would not exceed the assumptions of the Climate Action Plan (CAP) forecast and is therefore consistent with the CAP forecast. The potential impact of a cumulatively considerable net increase of greenhouse gas emissions is discussed at pages 3.3-17 through -20 of the DSEIR.

(b) Mitigation Measures. Moore Sheldon Retail Center Project mitigation measure MM 3.3.1 is hereby adopted and will be implemented as provided by the Mitigation Monitoring and Reporting Program.

(c) Findings. Based upon the DSEIR and the entire record before this City Council, this City Council finds that:

(1) Effects of Mitigation. Implementation of the mitigation measure would ensure that the proposed Project will implement mitigation measures identified as part of the CAP.

(2) Remaining Impacts. Implementation of the mitigation measure noted above would substantially reduce the Project's contribution to the net increase of greenhouse gas emissions, and the Project would be consistent with the City's CAP. This would represent a less than significant impact of the Project.

Noise

2. Noise Generated by On-site Stationary Sources (SEIR Impact 3.4.2)

(a) Potential Impact. The Project proposes commercial uses that would result in operational activities, such as truck circulation, delivery activities, car wash, vacuum stations, gas fueling, drive-through speakers, parking lot activities, and mechanical equipment on the buildings (e.g., rooftop HVAC units), that would generate noise. Operational noise levels would exceed the City's noise level standards at sensitive receptors located east and

north of the Project site. Car wash and vacuum stations occurring during the daytime hours and truck circulation, gas station, and north parking lot activities occurring during the nighttime hours would affect sensitive receptors located east of the Project site. Sensitive receptors located north of the Project site would be exposed to excessive operational noise generated by Starbuck's drive-through lane activities occurring during the daytime hours, and truck circulation, vendor delivery, Starbuck's drive-through lane, and north parking lot activities occurring during nighttime hours. Truck circulation activities would generate noise levels of 49 dB during the nighttime hours at sensitive receptors located east and north of the Project site, which would exceed the residential land use exterior noise level standard of 45 dB L_{eq} for nighttime. This impact is discussed on pages 3.4-12 through -17 of the DSEIR.

- (b) Mitigation Measures.** Moore Sheldon Retail Center Project mitigation measure MM 3.4.2 is hereby adopted and will be implemented as provided by the Mitigation Monitoring and Reporting Program.
- (c) Findings.** Based upon the SEIR and the entire record before this City Council, this City Council finds that:
- (1) Effects of Mitigation.** The impacts operational noise levels will be mitigated to a less than significant level by construction of an 8-foot soundwall, limiting loading activities (except fuel trucks), carwash, and vacuums to then hours of 7:00AM to 10:00PM, limiting maximum vacuum levels to 72 dBA at 10 feet, and shielding rooftop mechanical equipment. Implementation of these measures would ensure that noise levels at off-site locations do not exceed City standards.
- (2) Remaining Impacts.** Any remaining impacts related to Project operation would not be significant.

Traffic

3. Cumulative Roadway Network Operations (SEIR Impact 3.5.3)

- (a) Potential Impact.** Trips generated by the Project combined with other development and roadway improvements anticipated in the area by 2035 would contribute to the operations of the roadway network under Cumulative Plus Project conditions. Trips generated by the proposed Project would result in the level of service at the Sheldon Road/East Stockton Boulevard intersection degrading from an acceptable level of service of LOS E to unacceptable LOS F conditions during the AM peak hour and from LOS C to LOS D during the PM peak hour. One roadway segment (Sheldon Road from the State Route 99 northbound ramps to East Stockton Boulevard) would continue to operate at LOS F west of East Stockton Boulevard under Cumulative Plus Project conditions. This unacceptable level of service is consistent with the Sheldon/99 GPA and Rezone Project EIR (see Impact 4.5.4), which was previously disclosed to be cumulatively considerable and a significant and unavoidable impact. The contribution of trips from development of the entire Sheldon/99 GPA and Rezone Project were determined to be significant in the Sheldon/99 GPA and Rezone Project EIR and would remain significant. However, the Project's contribution to the increase in volume to capacity ratio with the Project would be less than 0.05. Therefore, the trips generated on study roadway segments by the Project would not be cumulatively considerable and this would be considered a less than significant cumulative impact. This impact is discussed on pages 3.5-25 through -30 of the DSEIR.

(b) Mitigation Measures. Moore Sheldon Retail Center Project mitigation measure MM 3.5.3 is hereby adopted and will be implemented as provided by the Mitigation Monitoring and Reporting Program.

(c) Findings. Based upon the SEIR and the entire record before this City Council, this City Council finds that:

(1) Effects of Mitigation. Implementation of the above mitigation measure would provide funding to construct a right-turn overlap phase on the southbound approach to the Sheldon Road/East Stockton Boulevard intersection, which would provide acceptable level of service of LOS E under Cumulative Plus Project conditions.

(2) Remaining Impacts. The segment of Sheldon Road from the State Route 99 northbound ramps to East Stockton Boulevard would continue to operate at LOS F west of East Stockton Boulevard under Cumulative Plus Project conditions. This impact was identified in the Sheldon/99 GPA and Rezone Project EIR (Impact 4.5.4), which was previously disclosed to be cumulatively considerable and a significant and unavoidable impact and was subject to override by the City Council in February 2009. The proposed Project would not increase the severity of this previously-identified impact.

V. Project Alternatives

A. Background – Legal Requirements

CEQA requires that environmental impact reports assess feasible alternatives or mitigation measures that may substantially lessen the significant effects of a project prior to approval (Public Resources Code Section 21002). With the exception of the "no project" alternative, the specific alternatives or types of alternatives that must be assessed are not specified. CEQA "establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. Each case must be evaluated on its own facts, which in turn must be reviewed in light of the statutory purpose" (*Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal.3d. 553, 556 [1990]). The legislative purpose of CEQA is to protect public health, welfare, and the environment from significant impacts associated with all types of development, by ensuring that agencies regulate activities so that major consideration is given to preventing environmental damage while providing a decent home and satisfying living environment for every Californian (Public Resources Code Section 21000). In short, the objective of CEQA is to avoid or mitigate environmental damage associated with development. This objective has been largely accomplished in the Project through the inclusion of Project modifications and mitigation measures that reduce the potentially significant impacts to an acceptable level. The courts have held that a public agency "may approve a developer's choice of a project once its significant adverse environment effects have been reduced to an acceptable level—that is, all avoidable significant damage to the environment has been eliminated and that which remains is otherwise acceptable" (*Laurel Hills Homeowners Assoc. v. City*, 83 Cal.App.3d 515, 521 [1978]).

B. Identification of Project Objectives

The CEQA Guidelines state that the "range of potential alternatives to the project shall include those that could feasibly accomplish most of the basic purposes of the project and could avoid or substantially lessen one or more of the significant effects" of the project (CEQA Guidelines Section 15126.6(c)). Thus, consideration of the Project objectives is important to determining which alternatives should be assessed in the SEIR.

The DSEIR identified the following objectives for the proposed Project:

- Provide a retail Project within one quarter to one half mile of a major freeway interchange.
- Maximize development potential for the Project.
- Provide a mix of retail/office uses that are the highest and best use for the Project location.
- Develop at a density that allows adequate parking and on-site circulation to serve proposed uses.

VI. Alternatives Analysis in SEIR

As discussed throughout the Draft SEIR, the proposed Project would not result in any new significant impacts or substantially increase the severity of any significant impacts previously disclosed in the Sheldon/99 GPA and Rezone Project EIR. Consequently, the SEIR considered the alternatives analyzed in the Sheldon/99 GPA and Rezone Project EIR.

1. Alternatives Considered But Rejected

Alternatives considered but rejected from further consideration include an alternative with higher density commercial development with no residential development in the Sheldon/99 GPA and Rezone Project area and an off-site alternative.

- (a) Findings.** The higher density commercial development with no residential development in the Sheldon/99 GPA and Rezone Project area was rejected from further consideration because this alternative would not have any less adverse environmental impacts than the proposed Project and would be anticipated to result in worse impacts to traffic and air quality.

The Sheldon/99 GPA and Rezone Project was undertaken in response to the improvements being made to the Sheldon Road/SR 99 interchange, so an alternate location would not be consistent with the City's objective to provide uses that complement the interchange reconstruction and roadway realignment. An off-site alternative would not be consistent with the Project objectives.

- (b) Explanation.** The higher density commercial development with no residential development in the Sheldon/99 GPA and Rezone Project area would not reduce impacts of the Project because, while the proposed Project does not include residential uses, the commercial use is not more intense and the Project does not preclude residential elsewhere in the Sheldon/99 GPA and Rezone Project area. An off-site alternative would not be consistent with the Project objectives in that it would not be consistent with the City's objective to provide uses that complement the interchange reconstruction and roadway realignment.

Alternatives Analyzed in the DSEIR

The CEQA Guidelines state that the "range of potential alternatives to the project shall include those that could feasibly accomplish most of the basic purposes of the project and could avoid or substantially lessen one or more of the significant effects" of the project. The City evaluated the alternatives listed below.

2. No Project Alternative (No Development and No Action Alternatives)

The No Project Alternative/No Development Alternative assumes that the proposed Project would not occur and there would be no development of the site. Under this scenario, there would be no

impacts and the physical conditions on the site would be those described under the existing conditions in the technical sections of the Draft SEIR.

The No Project/No Action Alternative assumes development consistent with the existing land use and zoning designations on the Project site, which would allow for development under the existing High Density Residential and Commercial designations on the site. Thus, the No Project/No Action Alternative is development consistent with the land uses approved under the Sheldon/99 GPA and Rezone EIR. As discussed throughout Section 4.0 Draft SEIR, the impacts associated with development under the existing designations allowed under the Sheldon/99 GPA and Rezone EIR would be similar to those of the proposed Project.

(a) Findings: The No Project/No Development Alternative is rejected as an alternative because it would not achieve the Project's objectives. The No Project/No Action Alternative is rejected as an alternative because it would not substantially reduce any significant and unavoidable environmental impacts compared to those of the proposed Project.

(b) Explanation: The No Project/No Development Alternative would not achieve the Project's objectives because there would be no development that would take advantage of the location near the freeway interchange. The No Project/ No Action Alternative would allow for the development of some retail on the Project site, but the ability to develop commercial uses could be somewhat constrained with a portion of the site developed with residential use. Development of the commercial parcel under existing zoning would be generally consistent with the Project objectives, but developing residential use would be generally inconsistent with the Project objectives. (Draft SEIR p. 4.0-6)

3. Reduced Residential Density Alternative:

The Reduced Residential Density Alternative in the Sheldon/99 GPA and Rezone Project EIR assumed 11.85 acres of the Sheldon/99 GPA and Rezone area would be designated for medium-density residential (7.1 to 15.0 du/ac) land uses rather than the high-density residential land use designation. As discussed in Draft SEIR Section 2.0, Project Description, the proposed Project would change the residential land use designation to a commercial designation, so the proposed Project eliminates the residential land uses for the Project site.

(a) Findings: The elimination of the residential land uses would not reduce any of the significant and unavoidable impacts identified in the Sheldon/99 GPA and Rezone EIR to such a degree that they would be reduced to a less than significant level.

(b) Explanation: To the extent that this alternative would maintain the same acreage for commercial and residential uses under the existing land use designations, the density of the residential development would not affect the retail uses on site. Similar to the No Project Alternative, some retail development could occur on the commercially designated parcel, but residential use would somewhat constrain the ability to develop commercial uses on the remainder of the site. Development of the commercial parcel under existing zoning would be generally consistent with the Project objectives, but developing residential use would be generally inconsistent with the Project objectives. (Draft SEIR p. 4.0-7)

4. Open Space Alternative:

The Open Space Alternative in the Sheldon/99 GPA and Rezone EIR would have changed 7.81 acres of land northeast of the future East Stockton Boulevard, designated High Density Residential in the Sheldon/99 GPA and Rezone Project, to an Open Space designation. The Sheldon/99 GPA and

Rezone EIR found that this alternative would reduce physical effects, but not necessarily to a less than significant level.

(a) Findings: Conversion of the Project site to Open Space would not be consistent with the Project objectives, which would entail development with commercial uses.

(b) Explanation: The Open Space area included in this alternative is not part of the proposed Project site and would not reduce impacts of the proposed Project. An alternative that includes all or a portion of the proposed Project for Open Space would reduce impacts of the proposed Project, but because the proposed Project represents only 4.46 acres, it would be less than the Open Space assumed in the Sheldon/99 GPA and Rezone EIR and would not reduce the overall impacts identified in the Sheldon/99 GPA and Rezone EIR to a less than significant level. (Draft SEIR p. 4.0-7)

5. Reduced Commercial Alternative:

The Reduced Commercial Alternative analyzed in the Sheldon/99 GPA and Rezone EIR assumed a 10 percent reduction in the amount of commercial uses that would be developed in the Sheldon/99 GPA and Rezone area. The Sheldon/99 GPA and Rezone EIR found that there would be some reductions in the severity of traffic impacts and there would be associated reductions related to air quality and greenhouse gases, but these impacts would not be reduced to less than significant levels. As discussed in Section 2.0 Project Description, the Sheldon/99 GPA and Rezone EIR assumed a 0.35 floor area ratio (FAR; the ratio of building square footage to the area of the site) for commercial uses. The proposed Project has a FAR of 0.14 (27,430 square feet on a 4.46-acre [194,278-square-foot] site). Consequently, the proposed Project exceeds the reduction in commercial square footage assumed in the Reduced Commercial Alternative. However, as discussed throughout Draft SEIR Section 4.0, this reduction does not reduce significant impacts identified in the Sheldon/99 GPA and Rezone EIR to a less than significant level.

(a) Findings: The commercial reduction under this alternative does not reduce significant impacts identified in the Sheldon/99 GPA and Rezone EIR to a less than significant level. This alternative may be considered inconsistent with the Project objectives.

(b) Explanation: The proposed Project exceeds the reduction in commercial square footage assumed in the Sheldon/99 GPA and Rezone EIR Reduced Commercial Alternative, but does not reduce significant impacts identified in the Sheldon/99 GPA and Rezone EIR to a less than significant level. This alternative could provide a retail Project within one quarter to one half mile of a major freeway interchange and could be developed at a density that allows for adequate parking and on-site circulation. However, an alternative that reduces the density of the proposed project may be considered inconsistent with the objectives to maximize development potential for the Project and provide for the highest and best use for the Project location. (Draft SEIR p. 4.0-7 through 4.0-8)

6. Environmentally Superior Alternative

The environmentally superior alternative is discussed on page 4.0-8 of the DSEIR. the Open Space Alternative would be the environmentally superior alternative. For the proposed Project, an alternative that designates all or a portion of the Project site for Open Space would reduce the intensity of development on the site and reduce the overall impacts of the Project.

However, given the Project site's proximity to the Sheldon Road/State Route 99 Interchange, the Project site would be better suited for a more intense land use that would take advantage of

existing traffic volumes and access. The Open Space Alternative would not be consistent with the Project objectives.

Exhibit D

MITIGATION MONITORING AND REPORTING PROGRAM MOORE SHELDON RETAIL CENTER PROJECT EG-11-033

A. INTRODUCTION

The California Environmental Quality Act (CEQA) requires review of any project that could have significant adverse effects on the environment. In 1988, CEQA was amended to require reporting on and monitoring of mitigation measures adopted as part of the environmental review process. This Mitigation Monitoring and Reporting Plan (MMRP) is designed to aid the City of Elk Grove in its implementation and monitoring of measures adopted from the Moore Sheldon Retail Center Subsequent Environmental Impact Report (SEIR).

B. MITIGATION MEASURES

The mitigation measures are taken from the Moore Sheldon Retail Center Project SEIR (as amended in the Final SEIR, as appropriate). The mitigation measures are assigned the same number they had in the Draft SEIR. The MMRP describes the actions that must take place to implement each mitigation measure, the timing of those actions, and the entities responsible for implementing and monitoring the actions.

As discussed in the Draft SEIR, the SEIR was prepared as a Subsequent EIR to the Sheldon/99 GPA and Rezone EIR, pursuant to CEQA Guidelines Section 15162. The City determined that because the proposed Project requests changes to land uses previously analyzed for environmental effects in the Sheldon/99 GPA and Rezone EIR, an SEIR was necessary for the proposed Project. The Moore Sheldon Retail Center Project is subject to the adopted mitigation measures described in the Mitigation Monitoring and Reporting Program (MMRP) for the Sheldon/99 GPA and Rezone EIR (included as an appendix to the Draft SEIR).

C. MMRP COMPONENTS

The components of each monitoring form are addressed briefly, below.

Mitigation Number: This is the number given the mitigation measure *in the Draft EIR*.

Mitigation Measure: All mitigation measures that were identified in the Draft SEIR, as amended in the Final SEIR, as appropriate, are presented.

Timing: Each action must take place prior to the time at which a threshold could be exceeded. Implementation of the action must occur prior to or during some part of approval, project design or construction, or on an ongoing basis. The timing for each measure is identified.

Enforcement/Monitoring: This item identifies the entity that will undertake the required action. The City of Elk Grove is responsible for ensuring that most mitigation measures are successfully implemented. Within the City, a number of departments and divisions could have responsibility for monitoring some aspect of the overall project.

MITIGATION MONITORING AND REPORTING PROGRAM

MM Number	Mitigation Measure	Timing/ Implementation	Enforcement/ Monitoring
<p>MM 3.3.1</p>	<p>Prior to building permit approval, the City of Elk Grove Planning Department shall require that the Project applicant implement the following measures to reduce emissions of GHGs associated with the proposed Project, based on the referenced measures from the City's CAP and City of Elk Grove Municipal Code:</p> <ul style="list-style-type: none"> • All buildings constructed shall achieve Tier 1 of Title 24, Part 1 green building standards to exceed minimum Title 24 energy efficiency standards by 15 percent, consistent with CAP Measure BE-6. • The proposed Project shall provide rewiring or conduit for solar photovoltaic (PV) in each proposed building, consistent with CAP Measures BE-10. The intent of rewiring for solar PV systems is to reduce barriers to later installation of on-site solar PVs. The proposed Project may also satisfy the intent of this mitigation by installing on-site solar PV systems. • The Project shall provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas, consistent with CAP measure RC-1. Composting of a limited amount of food waste that may be generated as a byproduct of on-site food preparation shall be completed by agreement with a waste hauler. Cooking oils shall be directed off site for reuse. • All parking lots for shopping centers or office developments constructed as part of the proposed Project shall include designated carpool parking spaces near store entries, implementing CAP Measure TACM-3. • The Project applicant shall provide bicycle parking at a ratio of one bicycle parking space per 20 vehicle parking spaces, consistent with CAP Measure TACM-5. Provision of additional bicycle support facilities such as lockers and shower facilities, consistent with voluntary CAP Measure TACM-5, may qualify the applicant for eligibility to request a reduction in the minimum number of parking spaces required, pursuant to Elk Grove Municipal Code Sections 23.58.060 and 23.16.037. • During the design review process, the applicant shall demonstrate compliance with CAP Measure TACM-5 by showing an analysis of office and mixed-use building connections and orientation to pedestrian paths, bicycle paths, and existing transit stops within a half mile of the project site. As feasible, all such Project components shall orient Project toward an existing transit, bicycle, or pedestrian corridor with minimum setbacks, or support equivalent pedestrian, bicycle, or alternative transportation through other methods. • The proposed Project shall minimize setbacks from the street, provide pedestrian pathways, and use design 	<p><i>Prior to issuance of building permits.</i></p>	<p><i>City of Elk Grove Development Service</i></p>

MM Number	Mitigation Measure	Timing/ Implementation	Enforcement/ Monitoring
	<p>features for entrances and parking lots to encourage pedestrian access and safety between transit facilities, consistent with CAP Measure TACM-5.</p> <ul style="list-style-type: none"> • Indoor water conservation measures shall be incorporated, such as use of low-flow toilets, urinals, and faucets. • The Project shall ensure that low-water-use landscaping (i.e., drought-tolerant plants and drip irrigation) is installed. At least 75 percent of all landscaping plants shall be drought-tolerant as determined by a licensed landscape architect or contractor and in conformance with Chapters 14.10 and 23.54 of the Elk Grove Municipal Code. 		
<p>MM 3.4.2</p>	<p>The following noise reduction methods shall be incorporated into the Project design to reduce noise levels and achieve compliance with the City's exterior noise level limits.</p> <ul style="list-style-type: none"> • An 8-foot-tall sound wall, constructed with rough, split-face concrete block, shall be constructed along the north property line of the Project site. • Loading and delivery activities which require the use of semi-trucks shall be limited to daytime (7:00AM to 10:00PM) hours with the exception of gasoline deliveries, which shall be required to shut down truck engines and fill tanks using only gravity. • Individual vacuums shall be limited to a maximum sound level of 72 dBA at a distance of 10 feet. • Car wash and vacuum stations shall be limited to daytime (7:00AM to 10:00PM) hours only. • Rooftop mechanical equipment shall be shielded from view by building parapets and/or rooftop mechanical screen barriers. • The City Planning Department will confirm these measures are incorporated into the design prior to issuance of building permits. 	<p><i>Prior to issuance of building permits.</i></p>	<p><i>City of Elk Grove Development Service</i></p>
<p>MM 3.5.3</p>	<p>The Project applicant shall pay a fair-share contribution toward the installation of a right-turn overlap phase on the southbound approach to the Sheldon Road/East Stockton Boulevard intersection.</p> <p>Payment of the fee shall be collected prior to issuance of building permit.</p>	<p><i>Prior to issuance of building permits.</i></p>	<p><i>City of Elk Grove Development Service</i></p>

**CERTIFICATION
ELK GROVE CITY COUNCIL RESOLUTION NO. 2014-12**

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 January 22, 2014 by the following vote:

AYES : **COUNCILMEMBERS:** *Davis, Cooper, Detrick, Hume, Trigg*

NOES: **COUNCILMEMBERS:** *None*

ABSTAIN : **COUNCILMEMBERS:** *None*

ABSENT: **COUNCILMEMBERS:** *None*


**Jason Lindgren, City Clerk
City of Elk Grove, California**