

RESOLUTION NO. 2015-042

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE APPROVING THE SOUTHEAST POLICY AREA AIR QUALITY MITIGATION PLAN

WHEREAS, on July 9, 2014, the City Council adopted Resolution No. 2014-151, certifying the Environmental Impact Report for the Southeast Policy Area Strategic Plan; and

WHEREAS, on July 9, 2014, the City Council adopted the Southeast Policy Area Strategic Plan; and

WHEREAS, Mitigation Measure 5.3.2 requires the City to “prepare an Air Quality Management Plan (AQMP) that demonstrates a 15 percent reduction in nitrogen oxide (NOx) equivalents for the Southeast Policy Area Project, compared to an unmitigated project”; and

WHEREAS, Mitigation Measure 5.3.2 also requires the City to submit the AQMP to the Sacramento Metropolitan Air Quality Management District (SMAQMD) for review and endorsement; and

WHEREAS, the City has coordinated with SMAQMD on the form and content of the AQMP; and

WHEREAS, on February 4, 2015, SMAQMD provided correspondence (Exhibit A) that that the draft AQMP meets the requirements for a 15 percent operational emissions reduction for the Southeast Policy Area.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Elk Grove hereby finds the Southeast Policy Area AQMP exempt from the California Environmental Quality Act (CEQA) pursuant to State CEQA Guidelines Section 15183 based upon the following findings:

California Environmental Quality Act (CEQA)

Finding: No further environmental review is required for the SEPA Air Quality Mitigation Plan pursuant to CEQA Guidelines Section 15162.

Evidence: On July 9, 2014, the City Council certified an EIR for the Southeast Policy Area Strategic Plan (State Clearinghouse No. 2013042054). The SEPA EIR analyzed full buildout of SEPA based upon the land plan, development standards, and policies contained in the Community Plan and Special Planning Area, as well as the improvements identified in the accompanying infrastructure master plans.

State CEQA Guidelines Section 15162 (Subsequent EIRs and Negative Declarations) requires that when an EIR has been certified for an adopted project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, that one or more of the following exists:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with exercise of reasonable diligence at the time of the previous EIR was certified as complete shows any of the following:
 - a. The project will have one or more significant on discussed in the previous EIR;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measures or alternative.

Staff has reviewed the Project and analyzed it based upon the above provisions in Section 15162 of the State CEQA Guidelines. There are no substantial changes in the Project from that analyzed in the 2014 EIR and no new significant environmental effects, or substantial increase in the severity of previously identified significant effects. No new information of substantial importance has been identified.

Further, since no changes to the EIR are necessary to support the Project, the City is not required to prepare an Addendum to the EIR as required by State CEQA Guidelines Section 15164.

Therefore, the prior EIR is sufficient to support the proposed action and no further environmental review is required.

AND, BE IT FURTHER RESOLVED that the City Council of the City of Elk Grove hereby approves the Southeast Policy Area AQMP as provided in Exhibit B, attached hereto and incorporated herein by this reference.

PASSED AND ADOPTED by the City Council of the City of Elk Grove this 11th day of March 2015.




GARY DAVIS, MAYOR of the
CITY OF ELK GROVE

ATTEST:



JASON LINDGREN, CITY CLERK

APPROVED AS TO FORM:



JONATHAN P. HOBBS,
CITY ATTORNEY



February 4, 2015

SENT VIA EMAIL

Mr. Christopher Jordan
Planning Manager
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

**RE: Southeast Policy Area Air Quality Management Plan
SMAQMD# SAC200601004**

Dear Mr. Jordan:

Thank you for being proactive and contacting the Sacramento Metropolitan Air Quality Management District (District) to work cooperatively on an Air Quality Mitigation Plan (AQMP) for the Southeast Policy Area (SEPA). The percent emission reduction demonstrated by the AQMP is 17.6 (summer) and 18 percent (winter) which will meet the requirement for a 15 percent operational emissions reduction for the SEPA project. As the project moves forward toward build out and particularly as changes to current proposals may need to occur, it will be important to ensure that the overall air quality reducing features and strategies are carried forward.

The SMAQMD looks forward to the successful implementation of this AQMP and the SEPA project as a whole and the intended result of improved air quality and circulation for both the City of Elk Grove and the wider Sacramento area as well.

If at any time I can be of further assistance please contact me at cmcghee@airquality.org or 916.874.4883.

Sincerely,

A handwritten signature in black ink that reads "Charlene McGhee". The signature is written in a cursive, flowing style.

Charlene McGhee
Associate Air Quality Analyst

c: Seth Myers, PMC
Larry Robinson, Sacramento Metropolitan AQMD

**SOUTHEAST POLICY AREA STRATEGIC
PLAN PROJECT
AIR QUALITY MITIGATION PLAN**

PREPARED BY

PMC


**FOR
CITY OF ELK GROVE**

JANUARY 2015

SEPA AIR QUALITY MITIGATION PLAN

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INTRODUCTION

INTRODUCTION

According to the Sacramento Metropolitan Air Quality Management District (SMAQMD), projects that generate a significant impact for ozone precursor emissions (nitrogen oxide and reactive organic gases) should create an Operational Air Quality Mitigation Plan (AQMP) to minimize impacts. This AQMP identifies the potential increase in ozone precursor emissions as a result of the proposed Southeast Policy Area (SEPA) Strategic Plan (the Project) in the City of Elk Grove (City), as well as air quality impact reduction mitigation employed to reduce this projected increase by 15 percent, as consistent with SMAQMD protocol.

The Project area is approximately 1,200 acres located in the southern portion of the City and includes the entirety of the City's Southeast Policy Area, as designated in the General Plan. The Project area is located to the west of State Route (SR) 99, east of Big Horn Boulevard and Bruceville Road, south of Bilby Road and Poppy Ridge Road, and north of Kammerer Road. The Project area is generally bound by Poppy Ridge Road, Kammerer Road, a future extension of Big Horn Boulevard, and another future major roadway to the east (Lots Parkway), with a "panhandle" section that extends to the west along Kammerer Road. The panhandle section of the Project area is bounded by Kammerer Road to the south, Bruceville Road to the west, and Bilby Road to the north. In addition to the panhandle portion of the Project area to the southwest, the northeast triangular-shaped section of the Project area extends beyond Poppy Ridge Road to the east to SR 99 and north of the future extension of Kyler Road.

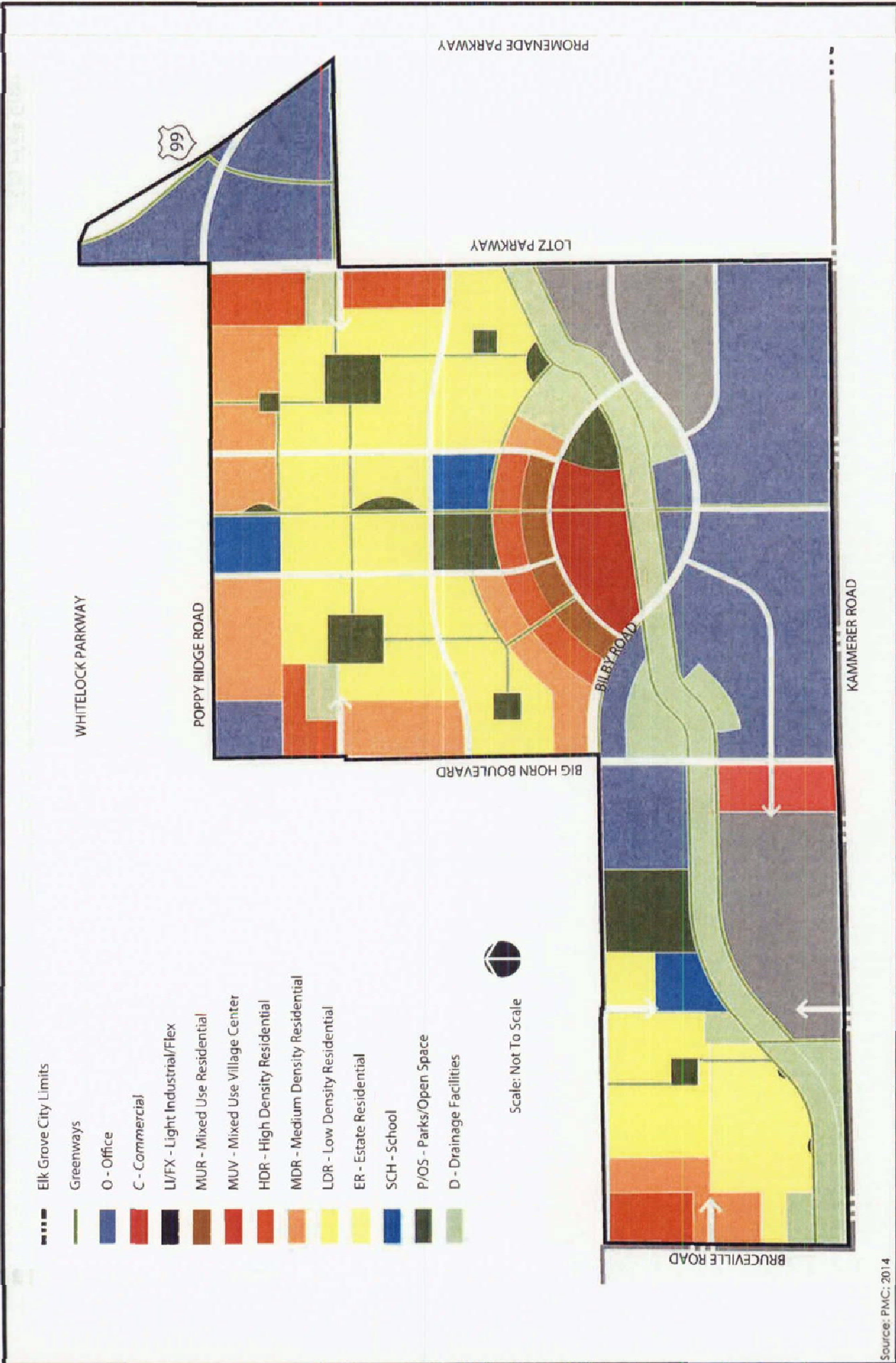
The primary objective for the SEPA Strategic Plan is to plan for a range of job opportunities that are supported by a balanced mix of locally oriented retail uses and residential densities. The SEPA Strategic Plan will be a regional destination for both employment activities and sports and entertainment. The SEPA Strategic Plan will integrate with surrounding land uses through the incorporation of parks and open space, trails, and landscape buffers. A complete transportation network made up of roadways, sidewalks, trails, and transit (including future light rail) will allow for the safe and effective movement of people and goods within the Plan Area and connect them with other parts of the City and region. The development standards contained in the SEPA Strategic Plan are intended to accommodate anticipated growth in a compact, walkable community through thoughtful, new mixed-use and complete neighborhoods. These factors contribute to less dependency on automobiles and thus fewer vehicle miles traveled and the associated air pollutant emissions.

Overall, proposed SEPA Strategic Plan land uses are centered around a core area located near the center of the Project area where the most intense land uses would be built surrounding a future extension of light rail. The core area would also be where most of the job-generating land uses would be located, including most of the Office, Light Industrial/Flex Space, and Mixed Use land uses planned for the Project. Residential densities have been laid out with the most intense residential areas closest to the core area, becoming less dense as the distance from the core area increases. This situates the highest densities and concentrations of both residents and jobs closest to transit and major roads.

The SEPA Strategic Plan includes a detailed land plan (**Figure 1**) that illustrates the location and alignment of specific land use types proposed. All subsequent development within the SEPA will be consistent with this land plan. The SEPA Land Plan includes the land uses shown in **Table 1**.

**TABLE 1
PROPOSED SPECIAL PLANNING AREA LAND USES AND APPROXIMATE ACREAGE**

Land Use	Acreage (Approximate)
Employment Hub/Core	
Office	280
Commercial	14
Light Industrial/Flex	108
Village Center	
Mixed Use Residential	14
Mixed Use Village Core	27
Residential/Neighborhood	
Estate Residential	63
Low Density Residential	212
Medium Density Residential	95
High Density Residential	61
Public/Semi-Public	
School	28
Parks/Open Space	61
Drainage Facilities	93
Trails	32
Major Right-of-Way	112
Total	1,200



Source: PMC; 2014



City of Elk Grove
Development Services

FIGURE 1
Land Plan

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Development of the Project area would result in the following maximum development potential (see **Table 2**).

**TABLE 2
MAXIMUM DEVELOPMENT POTENTIAL**

Land Use	Assumed Development Potential			
	Dwellings	Non-Residential Square Feet	Population	Jobs
Office	-	5,242,409	-	17,305
Commercial	-	179,177	-	423
Light Industrial/Flex	-	1,414,033	-	4,040
Village Center Mixed Use	326	993,311	1,058	1,465
Estate Residential	288	-	936	-
Low Density Residential	1,341	-	5,086	-
Medium Density Residential	1,324	-	5,018	-
High Density Residential	1,511	-	4,912	-
School	-	-	-	177
Total	4,790	7,828,930	17,010	23,410

Note: These are estimates of future development; no specific development project is proposed as part of the Project.

LONG-TERM INCREASES OF OZONE PRECURSORS

Implementation of the Project would result in long-term operational emissions of criteria air pollutants and ozone precursors (i.e., reactive organic gases and nitrogen oxide). Project-generated increases in emissions would be predominantly associated with motor vehicle use. To a lesser extent, area sources, such as the use of natural-gas-fired appliances, landscape maintenance equipment, and architectural coatings, would also contribute to overall increases in emissions.

The SMAQMD provides guidance for proposed projects like the SEPA Strategic Plan to mitigate estimated air pollutant emissions by 15 percent. According to the SMAQMD, the creation and implementation of an operational AQMP represents appropriate mitigation, provided it reduces ozone precursors (ROG and NO_x) below an unmitigated project by 15 percent for projects considered in the State Implementation Plan.¹

The SMAQMD has established a protocol for AQMP preparation, which states that on a pound-for-pound basis, NO_x reductions provide greater ozone benefits than ROG reductions. As such, the SMAQMD recommends normalizing ozone precursors based on their ozone creation potential in units of Equivalent Oxides of Nitrogen (NO_xe). **Table 3** shows the NO_xe conversion rate.

¹ Areas with air quality that exceed adopted air quality standards are designated as nonattainment areas for the relevant air pollutants. 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.

**TABLE 3
NO_xe CONVERSION RATE**

Ozone Precursor	Equivalent Oxides of Nitrogen
Nitrogen Oxide	1
Reactive Organic Gases (ROG)	1/3

Operational emissions associated with buildout of the proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects. In accordance with the SMAQMD protocol for AQMP preparation, two separate Project scenarios were calculated with the CalEEMod computer program. The first scenario was calculated to account for the proposed SEPA land uses based on the default settings in the CalEEMod computer program for Sacramento County to establish the unmitigated Project baseline. Recognizing that site-specific information is better than information generated from the defaults contained in the CalEEMod model, the second scenario was calculated to account for the results of the traffic study prepared for the SEPA Strategic Plan (Fehr & Peers 2014) in order to establish the mitigated Project scenario. According to the SMAQMD, traffic studies typically include calculations of internal trip capture, mix of uses, distance to job centers, and, sometimes, walking and cycling information.

Modeling for the unmitigated baseline scenario was based on the default settings in the computer program for Sacramento County. Long-term operational emissions attributable to the unmitigated baseline Project scenario are summarized in **Table 4**. At completion, the unmitigated baseline Project scenario would result in a maximum net increase of ROG of approximately 779.59 pounds per day (lbs/day) and 606.22 lbs/day of NO_x. (Note that emissions rates differ from summer to winter, because weather factors are dependent on the season, and these factors affect pollutant mixing/dispersion, ozone formation, etc.)

**TABLE 4
UNMITIGATED OPERATIONAL BASELINE EMISSIONS – PROJECT AREA BUILDOUT**

Operations	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Nitrogen Oxide Equivalents (NO _x e)
Summer Emissions – Pounds per Day (Unmitigated)			
Unmitigated Project Baseline	779.59	538.31	798.17
Winter Emissions – Pounds per Day (Unmitigated)			
Unmitigated Project Baseline	749.76	606.22	856.14

Source: CalEEMod version 2013.2.2. Refer to the Appendix for model data outputs. Estimated emissions account for default trip generation rates contained in the CalEEMod computer software, which estimates 124,371 average daily trips.

Modeling for the second scenario was calculated to account for the results of the traffic study prepared for the SEPA Strategic Plan (Fehr & Peers 2014) in order to establish the mitigated Project scenario. The traffic study prepared for the SEPA Strategic Plan determined that the combined effects of the Project's land use, location, and development scale would contribute to a reduction in off-site average vehicle "trips" (e.g., one vehicle trip is when a person drives from their home to shopping or their job; the return drive home is another trip). According to the traffic study, this reduction is due largely to the Project's mix of land use and proximity to commercial and retail services and connections between the Project and these services (Fehr & Peers 2014). The traffic study prepared for the Project was developed based on household travel

survey data obtained from 239 existing mixed-use developments in six metropolitan regions throughout the U.S., including developments in Sacramento (Fehr & Peers 2014). The internal capture percentage calculated for the Project is reflective of the land uses that would be developed as part of the Project and land use near the Project, which would reduce the need to travel beyond the Project site or surrounding area (Fehr & Peers 2014).

Long-term operational emissions attributable to the mitigated Project scenario, which accounts for the trip generation rate identified by the traffic report, are summarized in **Table 5**. At completion, the mitigated Project scenario would result in a maximum net increase of approximately 701.33 pounds lbs/day of ROG and 475.43 lbs/day of NO_x. Results are provided for summer and winter emissions.

**TABLE 5
MITIGATED OPERATIONAL EMISSIONS – PROJECT AREA BUILDOUT**

Operations	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Nitrogen Oxide Equivalents (NO _x e)
Summer Emissions – Pounds per Day			
Mitigated Project	701.33	423.82	657.59
Winter Emissions -- Pounds per Day			
Mitigated Project	678.60	475.43	701.63

Source: CalEMod version 2013.2.2. Refer to the Appendix for model data outputs. Estimated emissions account for the trip generation rates identified in the traffic impact study prepared for the project, which estimates 96,561 average daily trips.

As a result of the attributes of the proposed SEPA Strategic Plan that reduce vehicle miles traveled, the amount of air pollutant emissions is substantially reduced compared with the unmitigated baseline scenario. A comparison of the long-term operational emissions attributable to the unmitigated baseline scenario and the mitigated Project, which accounts for land use plan and mixed-use aspects of the SEPA, are summarized in **Table 6**.

**TABLE 6
UNMITIGATED PROJECT BASELINE & MITIGATED PROJECT COMPARISON**

Operations	Nitrogen Oxide Equivalents (NO _x e)
Summer Emissions – Pounds per Day	
Unmitigated Project Baseline	798.17
Mitigated Project	657.59
Percent Reduction from Baseline	17.6%
Percent Reduction Threshold	15%
Achieve Necessary Reduction?	Yes
Winter Emissions – Pounds per Day	
Unmitigated Project Baseline	856.14
Mitigated Project	701.63
Percent Reduction from Baseline	18.0%
Percent Reduction Threshold	15%
Achieve Necessary Reduction?	Yes

Source: CalEEMod version 2013.2.2 Refer to the Appendix for model data outputs.

EMISSION REDUCTIONS CONCLUSION

As shown in **Table 6**, the SEPA Strategic Plan Project components that lead to reductions in vehicle miles traveled are projected to reduce NO_xe by 17.6 percent in the summer months and 18.0 percent in the winter months. Therefore, the proposed SEPA Strategic Plan complies with SMAQMD ozone precursor reduction guidance and does not interfere with the air quality planning policies of the State Implementation Plan.

EMISSION REDUCTIONS IMPLEMENTATION

The traffic study prepared for the SEPA Strategic Plan determined that the combined effects of the Project's land use, location, and scale of development would contribute to a reduction in off-site average vehicle "trips". (e.g., one vehicle trip is when a person drives from their home to shopping or their job; the return drive home is another trip). The reduction of trips is accomplished through a physical design that places compatible uses in proximity and then ensures pedestrian, cycle and transit connections. The physical design of the Strategic Plan also provides a mix of uses allowing many tasks to be accomplished with a single vehicle trip. The land use plan was developed with connectivity as an overarching goal.

The land use plan is supported by a series of policies that ensure subsequent development follows the design principles reflected in the land use plan. While the guiding principles shaped the entire Southeast Area Plan, the following policies are key to the reduction of vehicle miles traveled reflected in the traffic study and subsequently the reduction of air pollutant emissions in the air quality analysis.

- Provide a mix of land uses, including residential and employment opportunities supported by commercial and neighborhood-oriented uses and services such as parks, pedestrian and bike paths/trails, and recreational opportunities.
- Provide mixed-use development (e.g., vertical mixed-use buildings with retail uses on the ground floor and office or residential on upper floors) within a Community Core that includes a future light rail station. Centrally locate the Core in the Plan Area and make it easily accessible by a range of uses and services.
- Provide landscaped parkways and pedestrian and bicycle connections throughout the Plan Area to provide linkages between land uses internally and to surrounding areas.
- Provide a multi-use facility of the main drainage channel within the Strategic Plan area by incorporating both drainage functions, recreation opportunities as possible, and pedestrian/bicycle trail amenities, with enhanced landscaping, that provide connective linkages between land uses internally.
- Locate educational facilities in the most effective locations for successful attendance, usefulness to the community, and utilization of future public transit facilities.
- Organize land uses and provide linkages to allow for a significant percentage of the Plan area's students, residents, and employees to be located within close proximity of, and easy access to, future transit facilities.
- Provide the sufficient intensity of residential and employment opportunities to attract an appropriate level of public transit services.
- Create a plan that is compatible with adjacent properties. Accommodate connectivity of roadways, pedestrian and bicycle access, and recreation facilities across Plan Area boundaries.

AIR QUALITY MITIGATION PLAN

As shown in the land use plan and the above policies, the Strategic Plan supports a range of complementary land uses chosen to support a mixed-use development pattern that would decrease dependence on individual automobile use and result in a reduction of vehicle-related emissions. Future development proposals must demonstrate compliance with the SEPA. The City will review all subsequent projects in the SEPA area to ensure that the projects substantially comply with the land uses and densities contained in Chapter 4 of the Strategic Plan (pages 4-26 through 4-62).

REFERENCES

Fehr & Peers. 2014. *Draft Transportation Impact Analysis: Southeast Policy Area*.

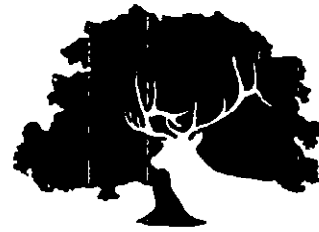
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APPENDIX

City of Elk Grove

Southeast Policy Area

Vision and Guiding Principles



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PROUD HERITAGE. BRIGHT FUTURE.

Planning Department
March 22, 2013

Vision Statement

The primary objective for the Southeast Policy Area is to plan for a range of job opportunities that are supported by a balanced mix of residential densities and locally oriented retail uses. The Southeast Policy area will be a regional destination for both employment activities and entertainment, such as sports or performing arts. The Southeast Policy Area will integrate with surrounding land uses through the incorporation of parks and open space, trails, and landscape buffers. A complete transportation network made up of roadways, sidewalks, trails, and transit (including light rail) will allow for the safe and effective movement of people and goods within the plan and connect them with other parts of the City and region. Development will be of quality design and materials that contribute to the sense of place and identity for the area.

Guiding Principles

The following principles provide an overarching development framework for the Southeast Policy Area.

(Source – City Council Direction = CC, Planning Commission Direction = PC, Staff Recommendation = SR, Economic Development Strategy = ED, Community Input = CO, Property Owner Input = PO)

I. URBAN DESIGN / PUBLIC AND PRIVATE REALM DESIGN

- Create a strong sense of identity, community, neighborhood, and development at a human scale. *(PC/SR/CO)*
- Require high quality urban design elements throughout the plan area by incorporating locally and environmentally sensitive landscaping, appropriate site amenities (sidewalk furniture, lighting, bike racks, etc.), and complementary architectural design. *(CO/SR)*
- Locate land uses in a manner that are complementary to each other thereby reducing the potential for interface conflicts. *(PC/CO/PO/SR)*

II. LAND USE

- Create a plan that provides a mix of land uses, including residential and employment opportunities supported by commercial and neighborhood-oriented uses and services such as parks, pedestrian and bike paths/trails, and recreational opportunities. *(PC/CO)*
- Provide flexibility in the intensity and density of land uses to respond to changes in economic, market and social factors while maintaining land use compatibility. *(PC/PO)*
- Provide space for a destination that can be both a local and regional draw (e.g., large sports complex and supportive uses). *(PC/CO)*.
- **Mixed-Use**
 - Encourage mixed-use development (e.g., vertical mixed-use buildings with retail uses on the ground floor and office or residential on upper floors) within a community core that includes a future light rail station. Centrally locate the Core in the Plan Area and make it easily accessible by a range of uses and services. *(PC/SR)*

- **Residential Uses**

- Provide a diverse range of housing densities and product types from low-density estate housing to higher density multi-family residential opportunities. *(PC/PO)*
- Multi-family residential uses should be located near transit facilities and, where feasible, near commercial and employment uses. *(SR)*

- **Employment Opportunities / Jobs Development**

- Designate sufficient employment-oriented land uses to create job opportunities and improve the jobs to housing balance within the City. *(CC/PC/SR/ED/CO)*

- **Public Services and Community-Oriented Uses**

- Locate educational facilities in the most effective locations for successful attendance, usefulness to the community, and utilization of future public transit facilities. *(SR)*
- Provide landscaped paseos and/or other off-street pedestrian amenities, increasing walkability and providing pedestrian connectivity throughout the Plan Area as well through adjacent properties. Provide linkages in an east-west and north-south direction. *(PC)*
- Create a plan that makes active and passive park facilities available at a level comparable to adjacent projects. *(SR)*
- Identify the main drainage channel within the Plan Area as a dual use facility, incorporating both drainage functions and recreation opportunities as possible. Recreation opportunities could include active trail amenities along the channel, enhanced landscaping, and other features as feasible. *(SR/CO/PO)*

III. CIRCULATION

- Organize land uses and provide linkages to allow for a significant percentage of the Plan Area's students, residents, and employees to be located within close proximity of, and easy access to, future transit facilities. *(PC/SR)*
- Provide the sufficient intensity of residential and employment opportunities to attract a appropriate level of public transit services. *(SR)*
- Provide landscaped parkways and pedestrian and bicycle connections throughout the Plan Area to provide linkages between land uses internally and to surrounding areas. *(PC/SR/CO)*
- Provide a circulation system that adequately supports the anticipated level of traffic in the plan area. *(SR/PO)*

IV. ENVIRONMENTAL SENSITIVITY

- Design the Plan Area in a manner which comprehensively addresses drainage and flood control for both on-site and off-site properties. *(CC/SR/PO)*

- Create a “self mitigating” plan that, to the extent feasible, incorporates environmental mitigation measures into project design. *(SR)*
- Require the efficient use of energy and resources. *(CO)*

V. CONTEXTUAL COMPATIBILITY

- Develop a plan that recognizes the right of existing uses, including residences, to continue and to minimize impacts upon these uses. *(PO)*
- Create a plan that is compatible with adjacent properties. Accommodate connectivity of roadways, pedestrian and bicycle access, and recreation facilities across Plan Area boundaries. *(CO)*
- Create a plan that does not cannibalize on existing and planned commercial corridors and centers within the community. *(SR/ED)*

City of Elk Grove

Southeast Policy Area

Land Development Assumptions



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Planning Department
March 22, 2013

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1.0 Introduction

The development of the land plan for the Southeast Policy Area includes four critical components. First, a menu of land use designations that define the character of new development (see Summary of Land Use Designations, Draft Land Use Concept). Next is the Guiding Principles, which define the vision for the project area and guide the development of the land use plan. Third is the draft land plan itself, which shows the location of land uses and backbone circulation system.

The final element is this document, the *Land Development Assumptions*. This document summarizes the development potential under the draft land plan and documents the assumptions that go into these calculations. It serves as a record of this process and facilitates the analysis process that will occur through subsequent engineering studies (traffic, water, wastewater, drainage) and the environmental review.

This document is organized into the following sections:

- **Section 2: Development Assumptions by Land Use Designation** – This section describes the development assumptions for each of the land use designations.
- **Section 3: Geographic Subareas (Traffic Analysis Zones)** – This section identifies the subareas of the Southeast Policy Area that are used for analysis purposes. These areas are commonly referred to as Traffic Analysis Zones (TAZ).
- **Section 4: Summary of the Land Plan** – This section summarizes the acreage totals for each land use by TAZ.
- **Section 5: Development Potential** – This section presents the calculations of development potential within the Southeast Policy Area overall and by TAZ.
- **Section 6: Resident Demographics** – This section uses 2010 Census information to project the population characteristics of the residential portion of the plan area.
- **Section 7: Parkland Requirements** – Using the population information in Section 6, this section describes the parkland dedication requirements for the project area.
- **Section 8: School Demand** – This final section describes the anticipated school needs within the plan area.

2.0 Development Assumptions by Land Use Designation

There are twelve unique land use designations identified for use in the Southeast Policy Area. These uses range from residential to commercial, office, and light industrial. They also include schools, parks, and open space/drainage areas. This section describes the intensity and density assumptions for each land use that will be used in subsequent sections to determine the development potential of the project area.

2.1 Residential Land Uses

There are four “pure” residential land uses identified in the land use menu. Based upon the General Plan land use matrix, the allowed density range for these uses runs from one dwelling per half acre to 40 units per acre. Table 2.1.1 summarizes the density range and an assumed density for each designation. The assumed density will be used in Section 5 to calculate the development potential of the land. The assumed density is based upon the most common development type found within the allowed density range and is not meant as a limitation on holding capacity.

TABLE 2.1.1: RESIDENTIAL DEVELOPMENT ASSUMPTIONS

Land Use Designation	Symbol	Density Range (dwellings per gross acre)	Assumed Density (dwellings per gross acre)
Estate Residential	ER	0.6 to 4.0	4.0
Low Density Residential	LDR	4.1 to 7.0	5.5
Medium Density Residential	MDR	7.1 to 15.0	12.1
High Density Residential	HDR	15.1 to 40	24.9

2.2 Non-Residential Land Uses

There are three non-residential land uses available for the Southeast Policy Area, including commercial, office, and light industrial/flex space. The development potential calculations in Section 5 will rely on two key assumptions in order to determine development potential – floor area ratio and employees per acre.

The floor area ratio requires a detailed set of assumptions in order to generate a reasonable value that can be applied to the gross acreage of land to yield building square footage, including parking demand and landscape requirements. Within each land use category, one or more employment sectors (retail, office, industrial) are assumed to occur. This is important because parking rates are based upon these employment sectors.

Employee per acre assumptions are based upon the floor area ratio, an assumed mix of employment in each land type, and average rates of building square footage per employee. The square footage assumptions are also broken down into the same sectors used to generate the floor area ratio.

Tables 2.2.1, 2, and 3 summarize the development assumptions for each of the three non-residential land use types.

TABLE 2.2.1: COMMERCIAL DEVELOPMENT ASSUMPTIONS

Parking Assumptions			
Type	Surface	Parking Ratios by Sector	
Square foot of land per space	400	Retail	5 / 1,000 sf
		Office	4 / 1,000 sf
		Industrial	n/a
Land Assumptions			
Landscaping and Setbacks as percentage of lot	15%	Maximum Building Height (stories)	1
Sector Assumptions			
Percent of Development by Sector		Employee Square Footage by Sector	
Retail	75%	Retail	250
Office	25%	Office	300
Industrial	0%	Industrial	0
Resultant Development Assumptions			
Floor Area Ratio	0.29	Employee per Acre	27.18

TABLE 2.2.2: OFFICE DEVELOPMENT ASSUMPTIONS

Parking Assumptions			
Type	Surface	Parking Ratios by Sector	
Square foot of land per space	400	Retail	5 / 1,000 sf
		Office	4 / 1,000 sf
		Industrial	n/a
Land Assumptions			
Landscaping and Setbacks as percentage of lot	20%	Maximum Building Height (stories)	4
Sector Assumptions			
Percent of Development by Sector		Employee Square Footage by Sector	
Retail	2.5%	Retail	250
Office	97.5%	Office	300
Industrial	0%	Industrial	0
Resultant Development Assumptions			
Floor Area Ratio	0.43	Employee per Acre	62.75

TABLE 2.2.3: LIGHT INDUSTRIAL/FLEX DEVELOPMENT ASSUMPTIONS

Parking Assumptions			
Type	Surface	Parking Ratios by Sector	
Square foot of land per space	400	Retail	n/a
		Office	4 / 1,000 sf
		Industrial	3 / 1,000 sf
Land Assumptions			
Landscaping and Setbacks as percentage of lot	25%	Maximum Building Height (stories)	1
Sector Assumptions			
Percent of Development by Sector		Employee Square Footage by Sector	
Retail	0%	Retail	0
Office	75%	Office	300
Industrial	25%	Industrial	700
Resultant Development Assumptions			
Floor Area Ratio	0.30	Employee per Acre	37.34

2.3 Village Center Mixed Use Land Use

The Village Center Mixed Use Land Use combines aspects of the residential and non-residential land uses together to form a more urban development type. Table 2.3.1 describes the assumptions for this use type that result in the dwelling density, floor area ratio, and employee per acre assumptions. Note that the floor area ratio includes the residential component of the land use type.

TABLE 2.3.1: VILLAGE CENTER MIXED LAND USE DEVELOPMENT ASSUMPTIONS

Parking Assumptions			
Type	Surface	Parking Ratios by Sector	
Square foot of land per space	325	Residential	2 per unit
		Retail	4 / 1,000 sf
		Office	4 / 1,000 sf
		Industrial	n/a
Land Assumptions			
Landscaping and Setbacks as percentage of lot	30%	Maximum Building Height (stories)	3
Sector Assumptions			
Percent of Development by Sector		Employee Square Footage by Sector	
Residential	17%	Retail	250
Retail	33%	Office	300
Office	50%	Industrial	0
Industrial	0%	Residential Assumptions	
		Average dwelling size	1,400 sf
Resultant Development Assumptions			
Floor Area Ratio	0.40	Employee per Acre	51.79
Assumed Density (dwellings per gross acre)		2.11	

2.4 Sports Complex

The sports complex operates as an overlay designation in combination with the several other land use designations. For analysis purposes, the highest and most intensive use will be analyzed.

The sports complex is assumed to include the following features:

- 20,000 seat stadium with associated parking and concession facilities
- 12-15 practice/tournament fields
- 40,000 square feet of office space (front office)
- 30,000 square feet of maintenance/shop space

The stadium, parking, and office facilities are assumed located closest to State Route 99. The practice/tournament fields would be located on the balance of the acreage.

2.5 Schools

The final land use category is reserved for schools. These sites are assumed to have the development characteristics described in Table 2.5.1.

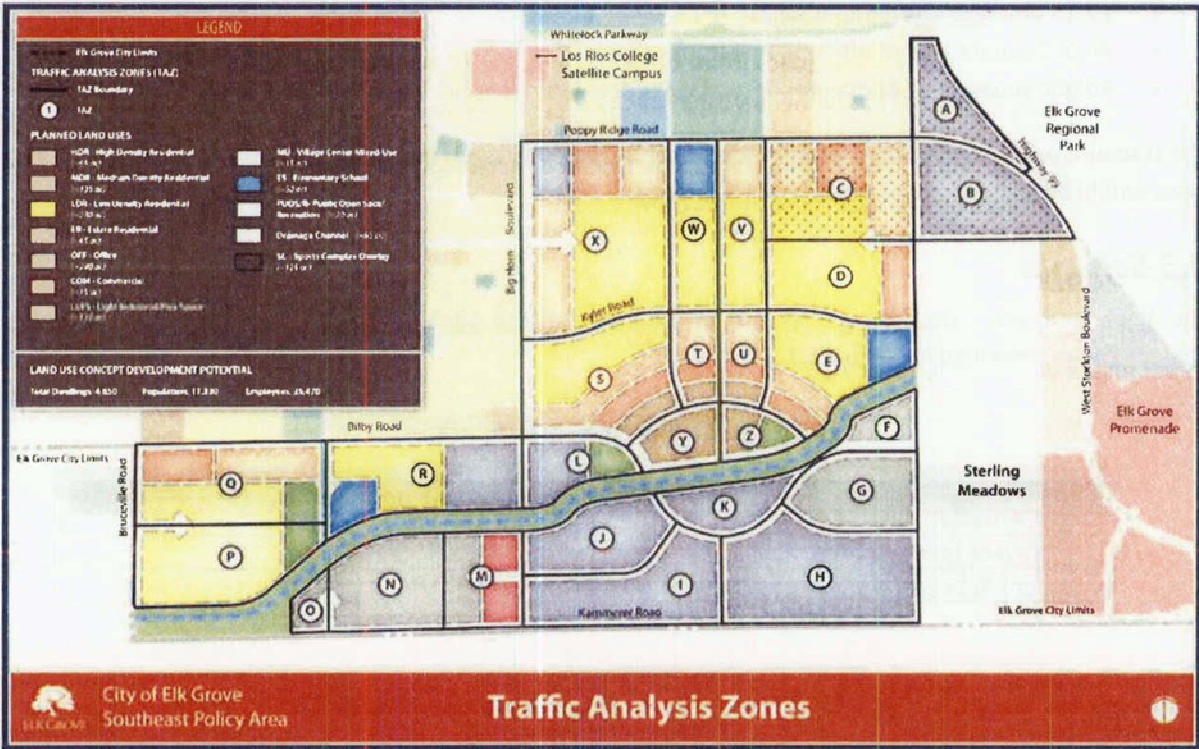
TABLE 2.5.1: SCHOOL DEVELOPMENT ASSUMPTIONS

Assumption	Metric
Floor Area Ratio	0.09
Employees (per acre)	6.41
Student Rate (square foot per student)	64.62

3.0 Geographic Subareas (Traffic Analysis Zones)

The Southeast Policy Area is divided up into 26 subareas for purposes of completing development analysis. These subareas are commonly referred to as Traffic Analysis Zones (TAZs). Figure 3.1 describes the location of the TAZs.

TABLE 3.1: TRAFFIC ANALYSIS ZONES



4.0 Summary of the Land Plan

The draft land plan is shown in Figure 4.1. The acreage of each land use is listed in total in Table 4.1 and by TAZ in Table 4.2.

FIGURE 4.1: DRAFT LAND USE PLAN

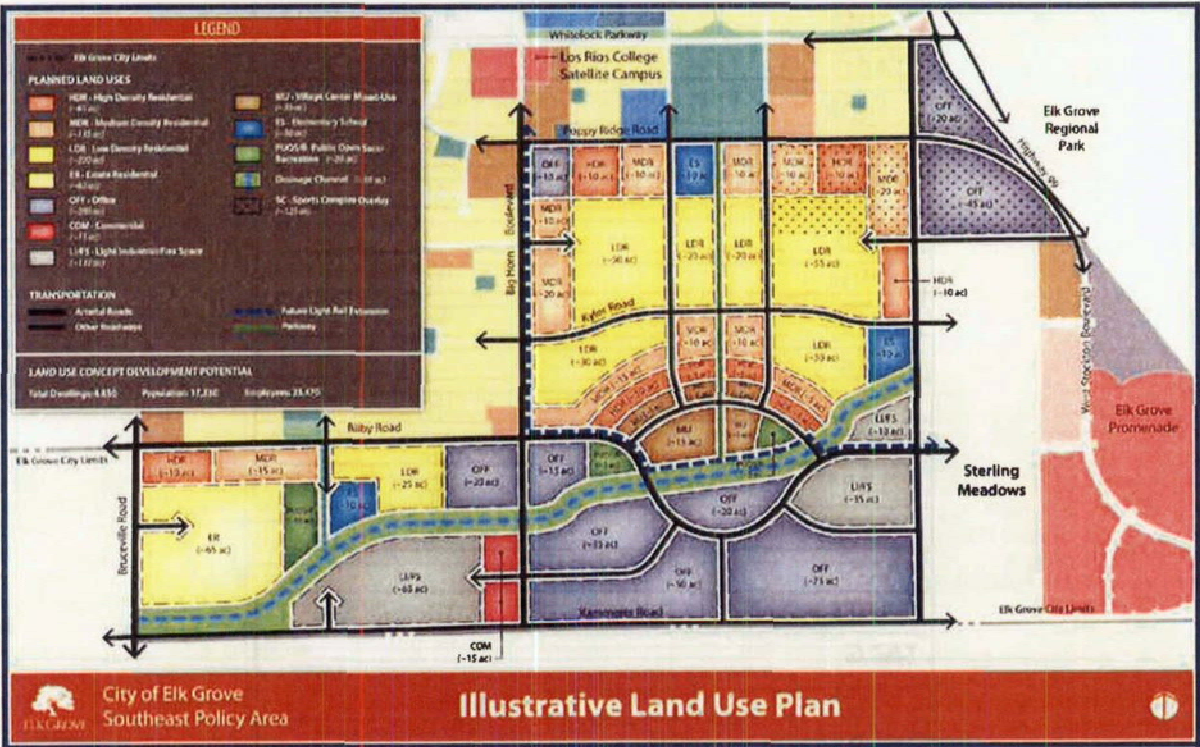


TABLE 4.1: LAND USE ACREAGE IN TOTAL

Land Use	Acreage (Approximate)
Estate Residential	65
Low Density Residential	230
Medium Density Residential	135
High Density Residential	65
Village Center Mixed Use	35
Commercial	15
Office	290
Light Industrial/Flex Space	95
School	30
Parks	20
Drainage Channel/Open Space	95
Major Right-of-Way and Drainage	105
TOTAL	1,200
Sports Complex Overlay	125

TABLE 4.2: LAND USE ACREAGE BY TAZ¹

TAZ/Land Use	Acreage (Approximate)
TAZ A	
OFF	20
TAZ B	
OFF	45
TAZ C	
HDR	10
LDR	20
MDR	30
TAZ D	
HDR	10
LDR	35
TAZ E	
ES	10
HDR	5
LDR	30
MDR	5
TAZ F	
LI/FS	10
TAZ G	
LI/FS	35
TAZ H	
OFF	75
TAZ I	
OFF	50
TAZ J	
OFF	35
TAZ K	
OFF	20
TAZ L	
OFF	15
PUOS	5
TAZ M	
COM	15
OFF	15
TAZ N	
LI/FS	65

TAZ/Land Use	Acreage (Approximate)
TAZ P	
ER	40
TAZ Q	
HDR	10
ER	25
MDR	15
TAZ R	
ES	10
LDR	25
OFF	20
TAZ S	
HDR	10
LDR	30
MDR	15
MU	5
TAZ T	
HDR	5
MDR	10
MU	5
TAZ U	
HDR	5
MDR	10
MU	5
TAZ V	
LDR	20
MDR	10
TAZ W	
LDR	20
ES	10
TAZ X	
HDR	10
LDR	50
MDR	40
OFF	10
TAZ Y	
MU	15

TAZ/Land Use	Acreage (Approximate)
TAZ Z	
MU	5
PUOS	5

Note:

1. Excludes parks, drainage/open space, and major roads

5.0 Development Potential

Three forms of development potential may be calculated -- dwelling units, building square footage, and employees. This section describes how these calculations are made and the data resulting from these calculations.

5.1 Residential Development

The dwelling unit development potential is a simple calculation of gross acreage by development type times the assumed density for that development type as listed in Section 2. Table 5.1.1 summarizes this calculation and the resulting dwellings.

TABLE 5.1.1: DWELLING UNIT POTENTIAL

Land Use	Total Acres	Assumed Density (du/gross acres)	Dwelling Units
Estate Residential	65	4.0	260
Low Density Residential	230	5.5	1,265
Medium Density Residential	135	12.1	1,635
High Density Residential	65	24.9	1,620
Mixed Use	35	2.11	70
TOTAL	530		4,850

5.2 Non-Residential Development

Non-Residential development potential is divided into two areas -- building square footage and employees. The building square footage is a calculation of the total gross acres, converted to square feet, times the floor area ratio for that development type. Employment is a calculation of the gross acreage times the employees per acre factor for the land use type. Table 5.2.1 summarizes this calculation.

TABLE 5.2.1: NON-RESIDENTIAL DEVELOPMENT

Land Use	Acres	Floor Area Ratio	Employees per Acre	Total Building Square Footage	Total Employees
Mixed Use ¹	35	0.4	51.79	609,840	1,810
Commercial	15	0.29	27.18	189,490	410
Office	305	0.43	62.75	5,712,890	19,140
Industrial/Flex Space	110	0.30	37.34	1,437,480	4,110
TOTAL				7,949,700	25,470³

Notes:

- Inclusive of dwelling space.
- As described in Section 2.4, the sports complex is an overlay designation. For purposes of this table, development under the office designation is assumed.
- School employment is estimated at 190, bringing the overall total to 25,660.

6.0 Resident Demographics

The residential population and demographic characteristics can be estimated for the land use plan based upon the latest Census data. This section describes the estimated population, its demographics, and how these calculations were derived.

The 2009 American Community Survey (ACS), a demographic report by the US Census Bureau, provides the latest population and household characteristics for the Elk Grove area. Similar data was not gathered during the 2010 Census. An analysis of Tables B25032 and B25033 from the ACS identifies the following household makeup.

TABLE 6.1: PERSONS PER HOUSEHOLD FOR ELK GROVE ACCORDING TO THE 2009 ACS

Dwelling Type	Persons per Household
Single Family	3.79
Multi-Family	3.25
Mobile Home	2.18

Applying this data to the land use plan for the Southeast Policy Area yields the following population.

TABLE 6.2: POPULATION PROJECTIONS FOR THE SOUTHEAST POLICY AREA

Land Use	Dwellings	Persons per Household	Population Projection
Estate Residential	260	3.79	845
Low Density Residential	1,265	3.79	4,795
Medium Density Residential	1,635	3.79	6,190
High Density Residential	1,620	3.25	5,260
Mixed Use	70	3.25	240
TOTAL	4,850		17,330

7.0 Jobs/Housing Balance

The draft Land Use Plan results in a jobs-housing ratio of 5.29:1. Staff anticipates that this would cause the City's overall rate, at buildout of the General Plan, to be 0.87:1.

TABLE 7.1: JOBS/HOUSING BALANCE IN THE SOUTHEAST POLICY AREA

	Units
Jobs	25,660
Housing Units	4,850
Ratio	5.29:1

8.0 Parkland Requirements

City and Cosumnes Community Service District (CCSD) parkland standards call for a minimum of five (5) acres of park land per 1,000 residents within a given service area. This land must, according to the CCSD Master Plan, be comprised of active park space. Trails, greenways, and similar “passive” open space do not count towards this requirement. The Southeast Policy Area represents a new service area and must, therefore, provide additional parkland to serve the projected population.

Section 6.0 describes the projected population based upon the land use plan’s design. A population of 17,330 is projected. Based upon the parkland rate of five acre per 1,000 residents, 87 acres of parks are required.

The land use plan includes 20 acres of parks, leaving a deficiency of 67 acres. The land plan also includes 95 acres of drainage/open space. It is assumed that a portion of the drainage/open space area can be developed with more “active” park features, thus allowing it to count towards the parkland requirement. The final land plan will need to identify this space.

9.0 School Demand

The land use plan identifies three elementary school sites, each 10 acres in size. Each site has capacity for approximately 850 students. Elk Grove Unified School District has reviewed the plan and has concluded that these sites, and others in the surrounding area, provide sufficient capacity for new students within the Southeast Policy Area. Tables 9.1 through 9.4 outline this analysis.

TABLE 9.1: STUDENT GENERATION FACTORS FOR ELK GROVE UNIFIED SCHOOL DISTRICT

Grade Range	Single Family	Multifamily
K-6	0.3843	0.3012
7-8	0.0994	0.0868
9-12	0.1995	0.1275

TABLE 9.2: SUMMARY OF DWELLINGS BY TYPE IN THE SOUTHEAST POLICY AREA

Dwelling Type	Units
SF Units	3,160
MF Units	1,690
Total	4,850

TABLE 9.3: STUDENT GENERATION IN THE SOUTHEAST POLICY AREA

Grade Range	Single Family	Multifamily	TOTAL
K-6	1,215	510	1,725
7-8	315	145	460
9-12	630	215	845
Total	2,025	615	3,030

TABLE 9.4: ELEMENTARY SCHOOL SITE REQUIREMENTS FOR AREAS SOUTH OF ELK GROVE BOULEVARD, EAST OF BRUCEVILLE ROAD, AND WEST OF SR-99

Development Area	Elementary Students	Number of Elementary School Sites Required	Number of Elementary School Sites Provided
Laguna Ridge	2,525	3	2
Sterling Meadows	438	0.6	0
Lent Ranch	84	0.1	0
SEPA	1,725	2.0	3
TOTAL	4,502	5.7	5

Note: Laguna Ridge included three sites when first approved. EGUSD passed on a site east of Big Horn in 2007.

Each school site is assumed to generate 6.41 employees per acre of school site. This yields approximately 190 employees between the three sites.

CERTIFICATION
ELK GROVE CITY COUNCIL RESOLUTION NO. 2015-042

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

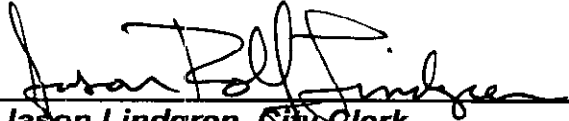
I, Jason Lindgren, City Clerk of the City of Elk Grove, California, do hereby certify that the foregoing resolution was duly introduced, approved, and adopted by the City Council of the City of Elk Grove at a regular meeting of said Council held on March 11, 2015 by the following vote:

AYES : **COUNCILMEMBERS:** *Davis, Hume, Detrick, Ly, Suen*

NOES: **COUNCILMEMBERS:** *None*

ABSTAIN : **COUNCILMEMBERS:** *None*

ABSENT: **COUNCILMEMBERS:** *None*


Jason Lindgren, City Clerk
City of Elk Grove, California