RESOLUTION NO. 2014-14

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE APPROVING A SUBSEQUENT MITIGATED NEGATIVE DECLARATION FOR THE FIELDSTONE NORTH PROJECT (EG-13-004); ASSESSOR PARCEL NUMBER 134-0110-154

WHEREAS, the Planning Department of the City of Elk Grove received an application on January 31, 2013 from LVP & Pappas Arizona LP & ETAL (the "Applicant") requesting a General Plan Amendment, Specific Plan Amendment, Rezone, Large Lot Tentative Subdivision Map, Small Lot Tentative Subdivision Map, and Design Review for the Large Lot Tentative Subdivision Map and Small Lot Tentative Subdivision Map layouts for the Fieldstone North 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: 134-0110-154; and

WHEREAS, the Project qualifies as a project under the California Environmental Quality Act (CEQA), Public Resource Code §§21000 et seq.; and

WHEREAS, the State CEQA Guidelines (Title 14 of the California Code of Regulations) Section 15162(a) identifies that when an environmental impact report (EIR) has been certified or a mitigated negative declaration (MND) has been adopted for a project, the CEQA Guidelines allow a subsequent environmental document to be prepared in the event that changes are made to the previously approved project and only minor changes are needed to the MND or EIR to address the changed project; and

WHEREAS, the City prepared an Initial Study and Subsequent Mitigated Negative Declaration, attached hereto as Exhibit A and incorporated herein by reference, pursuant to Section 15162(a) of CEQA; and

WHEREAS, based on staff's review of the Project, no special circumstances exist that would create a reasonable possibility that granting a General Plan Amendment, Specific Plan Amendment, Rezone, Large Lot Tentative Subdivision Map, Small Lot Tentative Subdivision Map, and Design Review for Large Lot Tentative Subdivision Map and Small Lot Subdivision Map Layouts for this Project will have a significant effect on the environment beyond what was analyzed in the Subsequent Mitigated Negative Declaration prepared for the Project and disclosed; and

WHEREAS, the City distributed the Notice of Intent to Adopt a Subsequent Mitigated Negative Declaration on October 25, 2013, which started the 30-day public review period, ending on November 25, 2013; and

WHEREAS, the City received three written comment letters within the 30-day public review period and responded to those comments in the Project staff report; and

WHEREAS, the City Council has considered the written comments received during the public review period, and determined that the comments do not alter the conclusions in the Initial Study and Subsequent Mitigated Negative Declaration; and

WHEREAS, a Mitigation Monitoring and Reporting Program (MMRP) has been prepared in accordance to CEQA, attached hereto as Exhibit B and incorporated herein by reference, which is designed to ensure compliance with the identified mitigation measures during Project implementation and construction.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Elk Grove hereby adopts the Subsequent Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program for the Fieldstone North Project attached hereto and incorporated herein by this reference based on the following finding:

Finding: The proposal will not have a significant adverse impact on the environment and all potentially significant effects have been adequately analyzed in a Subsequent Mitigated Negative Declaration that was prepared for the Fieldstone North Project by the City. The Subsequent Mitigated Negative Declaration adequately addresses all environmental issues related to the development of the subject property.

Evidence: Staff prepared an Initial Study for the Fieldstone North Project and mitigation measures have been developed that will reduce potential environmental impacts to less than significant levels. The mitigation measures established in the SMND are to supplement the mitigation measures that were established in the EEGSP EIR. All mitigation measures identified in the EIR will still apply for the Project.

The City distributed the Notice of Intent to Adopt the Subsequent Mitigated Negative Declaration on October 25, 2013. It was posted at the Sacramento County Clerk's office, distributed through State Clearinghouse and at the City offices, pursuant to CEQA Guidelines 15072. A 30-day review and comment period was opened on October 25, 2013 and closed November 25, 2013. The Subsequent Mitigated Negative Declaration was made available to the public during this review period. The City received three written comment letters within the 30-day public review period. These comments do not alter the conclusions of the Initial Study/Subsequent Mitigated Negative Declaration.

The City prepared a Mitigation Monitoring and Reporting Program (MMRP), as required by CEQA. The MMRP includes: (a) all significant or potentially significant impacts, level of significance without mitigation, proposed mitigation measures and the resulting level of significance.

On the basis of the Subsequent Mitigated Negative Declaration, environmental analysis, mitigation measures, and the whole record, the City Council finds that there is no substantial evidence that the Project will have a significant adverse impact on the environment above those addressed within the Subsequent Mitigated Negative Declaration, nor would any previously identified environment impact increase in severity from what was originally documented in the EIR, and the Mitigated Negative Declaration reflects the City Council's independent judgment and analysis.

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

CITY OF ELK GROVE

FIELDSTONE NORTH

DRAFT INITIAL STUDY AND NOTICE OF INTENT TO ADOPT A SUBSEQUENT MITIGATED NEGATIVE DECLARATION

Prepared by:

CITY OF ELK GROVE
8380 LAGUNA PALMS WAY
ELK GROVE, CA 95758

OCTOBER 2013

CITY OF ELK GROVE

FIELDSTONE NORTH

DRAFT INITIAL STUDY
AND NOTICE OF INTENT TO ADOPT A
SUBSEQUENT MITIGATED NEGATIVE DECLARATION

Prepared by:

CITY OF ELK GROVE
8380 LAGUNA PALMS WAY
ELK GROVE, CA 95758

OCTOBER 2013

APPENDICES

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1.0 INTRODUCTION

The Fieldstone North Project (proposed Project) requests entitlements for a General Plan Amendment, Specific Plan Amendment, Rezone, Large-Lot Tentative Subdivision Map, and Small-Lot Tentative Subdivision Map. The entitlements would allow for the development of 391 residential units on 107.1 acres located in the City of Elk Grove (City).

A. PURPOSE AND BACKGROUND OF THE INITIAL STUDY

When an environmental impact report (EIR) has been certified or a mitigated negative declaration (MND) has been adopted for a project, the California Environmental Quality Act (CEQA) Guidelines allow a subsequent environmental document to be prepared in the event that changes are made to the previously approved project and only minor changes are needed to the MND or EIR to address the changed project. CEQA Section 15162(a) sets forth the following criteria for determining whether a subsequent MND or EIR must be prepared in support of further agency action on the project:

> (a) When an EIR has been certified or negative declaration adopted for a project, 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, one or more of the following:
>
> (1) 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;
>
> (2) Substantial changes occur with respect to the circumstances under which the project is undertaken 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; or
>
> (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
>
> (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
>
> (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 measure or alterative.

As discussed in this subsequent MND, the modifications to the project approved as part of the East Elk Grove Specific Plan (EEGSP) proposed as part of the Fieldstone North Project require revisions to the East Elk Grove Specific Plan EIR (SCH#94112053) and would result in an increase in previously identified significant effects requiring the addition of new mitigation measures. As revisions to the original EIR would be necessary for it to adequately address the impacts of the proposed Project, the City has prepared a subsequent MND pursuant CEQA Guidelines Section 15162(a). All of the mitigation measures identified in the EIR will apply to the proposed Project. As discussed in the following checklist, with implementation of applicable EEGSP EIR mitigation measures and new mitigation identified as part of this supplement to the EIR, the proposed Project would not result in any new significant impacts, nor would any previously identified environmental impact increase in severity from what was originally documented in the EIR. The project proponent has accepted all mitigation measures adopted with the East Elk Grove Specific Plan EIR and the additional measures contained in this supplement to the East Elk Grove Specific Plan EIR (SCH#94112053). The City of Elk Grove has determined that only minor modification of the original EIR would be necessary for it to adequately address the impacts of the proposed Project.

LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose..." In this case, the City of Elk Grove (City) will serve as the lead agency for the Fieldstone North Project.

B. TECHNICAL STUDIES

Technical studies prepared for the proposed Project and referenced in this IS/MND are listed below. The technical studies are available at the City of Elk Grove Development Services Department at 8401 Laguna Palms Way, Elk Grove, CA 95758.

- Biological Resources Assessment, August 29, 2013 – Foothill Associates
- Environmental Noise Assessment, August 2013 – J.C. Brennan & Associates
- Transportation Impact Study, July 2013 – Fehr & Peers

2.0 PROJECT DESCRIPTION

A. PROJECT LOCATION AND SETTING

The proposed Project is located in the City of Elk Grove in Sacramento County, California (**Figure 1, Regional Location**). Within the City, the Project site is located in the East Elk Grove Specific Plan (EEGSP), a Policy Area within the Elk Grove General Plan Land Use Policy Map. This area of the City encompasses approximately 1,439 acres and is bounded by Bond Road on the north, Bradshaw Road on the east, Grant Line Road on the south, and Waterman Road on the west. The EEGSP area is planned for development with residential, commercial, industrial, schools, parks, open space, and rights-of-way, and portions have already been developed with some of these uses.

The proposed Project site is located west of the intersection of Bradshaw Road and Grant Line Road with developed residential uses to the north and on the northwest corner. The existing Derr-Okamoto Park is located directly to the north of the Project site. Undeveloped residential subdivisions are located directly to the west and the south, and another developed subdivision is located beyond the southwest corner of the Project site. The site is contained within Assessor's Parcel Number (APN) 134-0110-154 (**Figure 2, Project Site**).

The Project site is currently undeveloped. It has historically been used as grazing land for livestock and is currently dry farmland. A wetland delineation performed in 2013 on the Project site determined the following features are on-site: vernal pools, depressional seasonal wetlands, riverine seasonal wetland, riverine seasonal marsh, and a reach of Elk Grove Creek, which is located in the southernmost portion of the site. No structures exist on-site, and no known cultural, historic, or scenic aspects exist on-site.

B. PROJECT BACKGROUND AND HISTORY

The site was previously approved to allow the development of 178 residential units with residential densities ranging from 1 dwelling unit per 5 acres (1 du/5 ac) to 4 du/ac. The site had previously been constrained by the flight patterns (arrival/departure zone) of Sunset Skyranch Airport, located directly across Grant Line Road to the west, which limited the types of uses and densities which could be developed in the Project area. While an increase in density on the project site was not analyzed in the Environmental Impact Report for the EEGSP, the EEGSP considered the potential for the removal of the arrival/departure zone and assumed rezoning of the property at densities consistent with surrounding development (EEGSP p. 4-47). The proposed Project is consistent with the direction of the EEGSP regarding the subsequent rezone of the property.

In 2006, the Sacramento County Board of Supervisors denied renewal of the Sunset Skyranch Airport's use permit, and as a result, airport operations have ceased.

The Mitigation Monitoring and Reporting Program (MMRP) for the original EEGSP EIR has been recorded on the title of the property and is applicable to this revised Project (see Appendix A to this IS/MND). This IS/MND proposes additional mitigation applicable to the Project, as necessary to mitigate additional environmental impacts not previously addressed in the EEGSP EIR.

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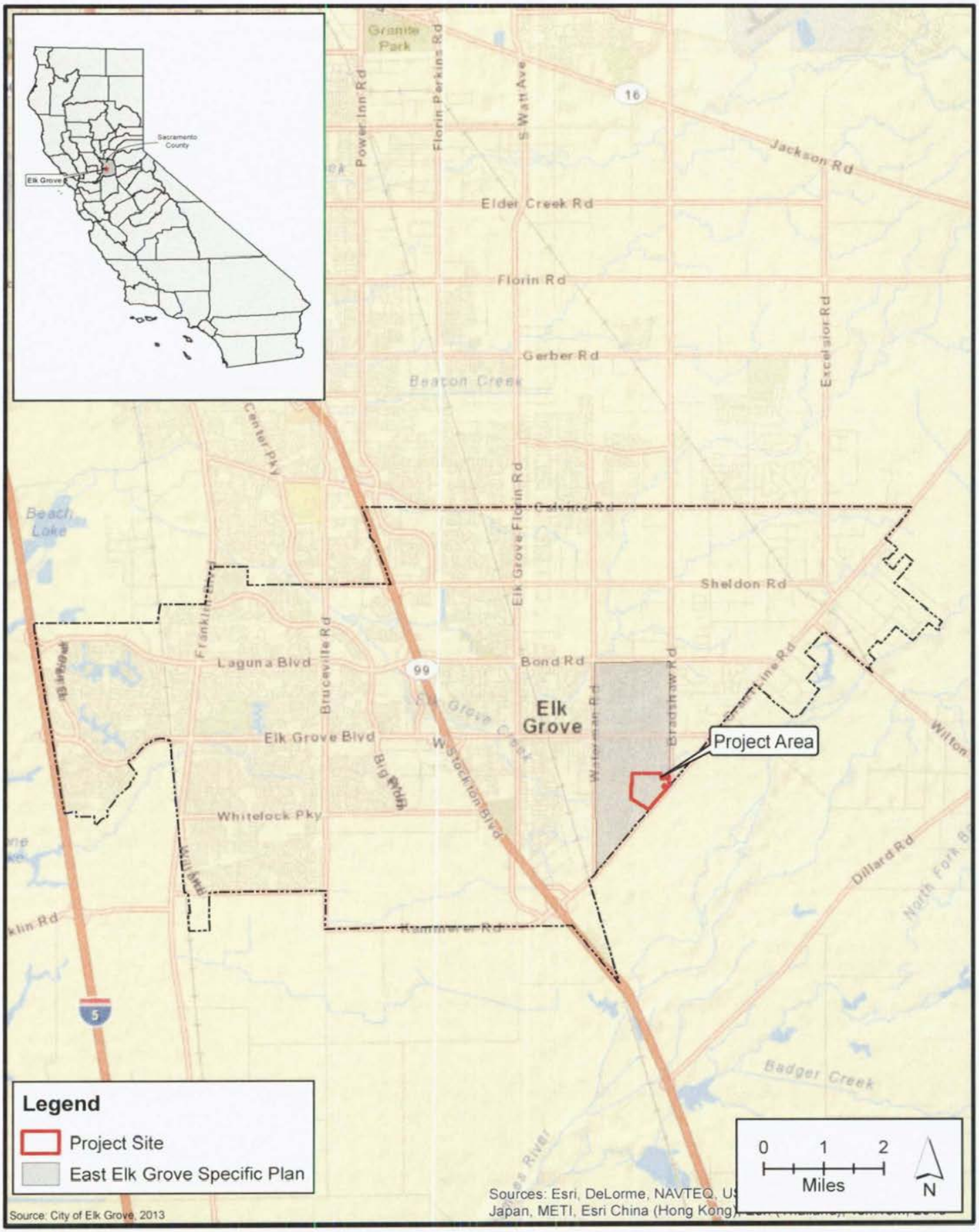


City of Elk Grove
Development Services

Figure 1

Regional Vicinity

City of Elk Grove
Development Services

Figure 2
Project Location

C. PROPOSED ACTIONS ADDRESSED IN THE IS/MND

The proposed Project is requesting the following entitlements:

1. General Plan Amendment (GPA) changing the General Plan land use designations of the Project site from Rural Residential (RR, 0.1–0.5 dwelling using per gross acre) and Estate Residential (ER, 0.51–4.0 dwelling units per gross acre), Low Density Residential (LDR, 4.1–7.0 units per acre), Public Park (PP), and Public Open Space/Recreation (PubOS/Rec)

2. Specific Plan Amendment (SPA) amending the East Elk Grove Specific Plan to change the land use designations on-site from Residential 5-acre lots, Residential 2–4 du/ac, Residential 4 du/ac, Parks and Open Space to Residential 5 du/ac, Parks, and Open Space/Drainage (see **Figure 3, Specific Plan Amendment**).

3. Rezoning of the 107.1-acre site from AR-10 to RD-5 and O.

4. Large-lot tentative subdivision map (TSM) of seven large residential parcels ranging in size from 9.3 to 14.4 acres and 21 smaller parcels for landscaping, rights-of-way, parks, drainage, etc. (see **Figure 4, Tentative Subdivision Map**).

5. Small-lot TSM of 391 single-family residential lots, ranging in size from 5,460 to 6,600 square feet (see **Figure 4**).

Subdivision Map(s)

As seen in **Figure 4**, the proposed Project would result in the potential for 391 residential lots, which is 213 more parcels than currently approved for the Project area. The residential parcels would be arranged along public roadways with sidewalk, curb, gutter, streetlights, and other improvements consistent with Section 23.16.080 of the Elk Grove Municipal Code (Design Review), which 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. Because the Project site is flat, minimal grading would occur, and the application materials indicate there will be no soil export from the site. A riverine seasonal wetland on the site would be modified by redirecting seasonal flows into the linear drainage lot (Large Lot D shown in **Figure 4**) to accommodate development of the Project. Utilities exist in the surrounding roadways, and no new transmission lines, pump stations, or off-site utility improvements would be needed to support the Project.

The analysis assumes compliance with all applicable state, federal, and local codes and regulations, including, but not limited to, City of Elk Grove Improvement Standards, the California Building Code, the Sacramento County Water Agency Code, the Guidance Manual of On-site Storm Water Quality Control Measures, the State Health and Safety Code, and the State Public Resources Code.

As the proposed Project is located within the EEGSP, the Project is required to be in compliance with all appropriate policies, conditions, and requirements and all appropriate mitigation measures contained in the EEGSP and EEGSP EIR. Furthermore, the EEGSP was included in the Elk Grove General Plan (2003a), and the environmental impacts of urbanization of the EEGSP area, including the proposed Project site, were programmatically analyzed in the Elk Grove General

Plan Volume 1: Draft Environmental Impact Report (2003b). This IS/MND assumes compliance with the applicable policies, conditions, and requirements in these documents and hereby incorporates them in the Project description. Mitigation measures added to this Project are consistent with changes in development standards in the City of Elk Grove since certification of the EEGSP EIR.

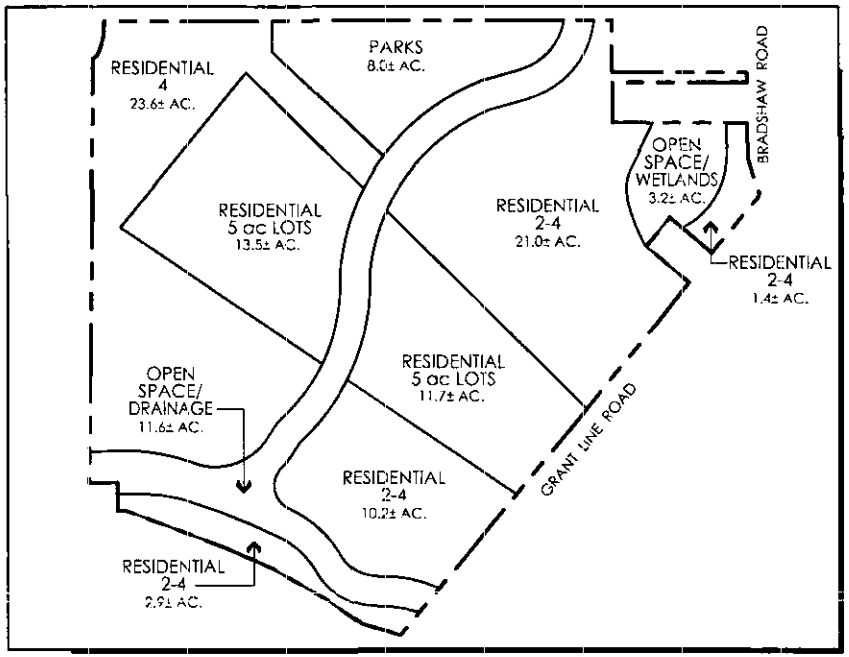
Copies of the EEGSP, EEGSP EIR, Elk Grove General Plan, and Elk Grove General Plan EIR can be viewed at the City offices at the following address Monday through Friday, during normal business hours:

Development Services Department
8401 Laguna Palms Way
Elk Grove, CA 95758

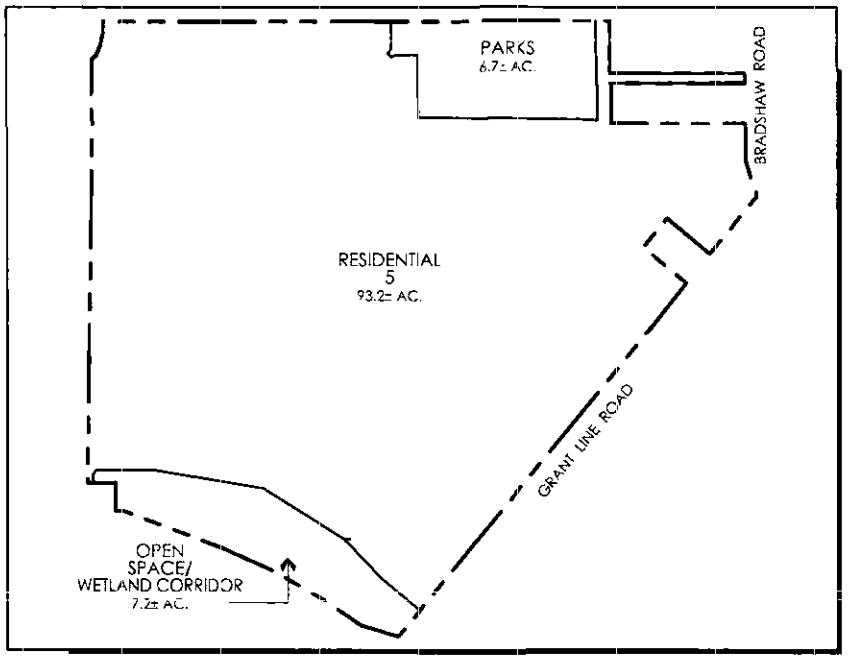
D. REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

Additional subsequent approvals and permits that may be required from local, regional, state, and federal agencies in the processing of the proposed Project that this Mitigated Negative Declaration may be used to support include, but are not limited to, the following:

- United States Army Corps of Engineers (USACE)
- California Department of Fish and Wildlife (CDFW)
- Central Valley Regional Water Quality Control Board (CVRWQCB)
- Sacramento Metropolitan Air Quality Management District (SMAQMD)
- Sacramento Regional County Sanitation District (SRCSD)
- Sacramento County Water Agency
- Cosumnes Community Services District Park and Recreation
- Cosumnes Community Services District Fire Department



EXISTING EAST ELK GROVE SPECIFIC PLAN



PROPOSED EAST ELK GROVE SPECIFIC PLAN

SUMMARY TABLE

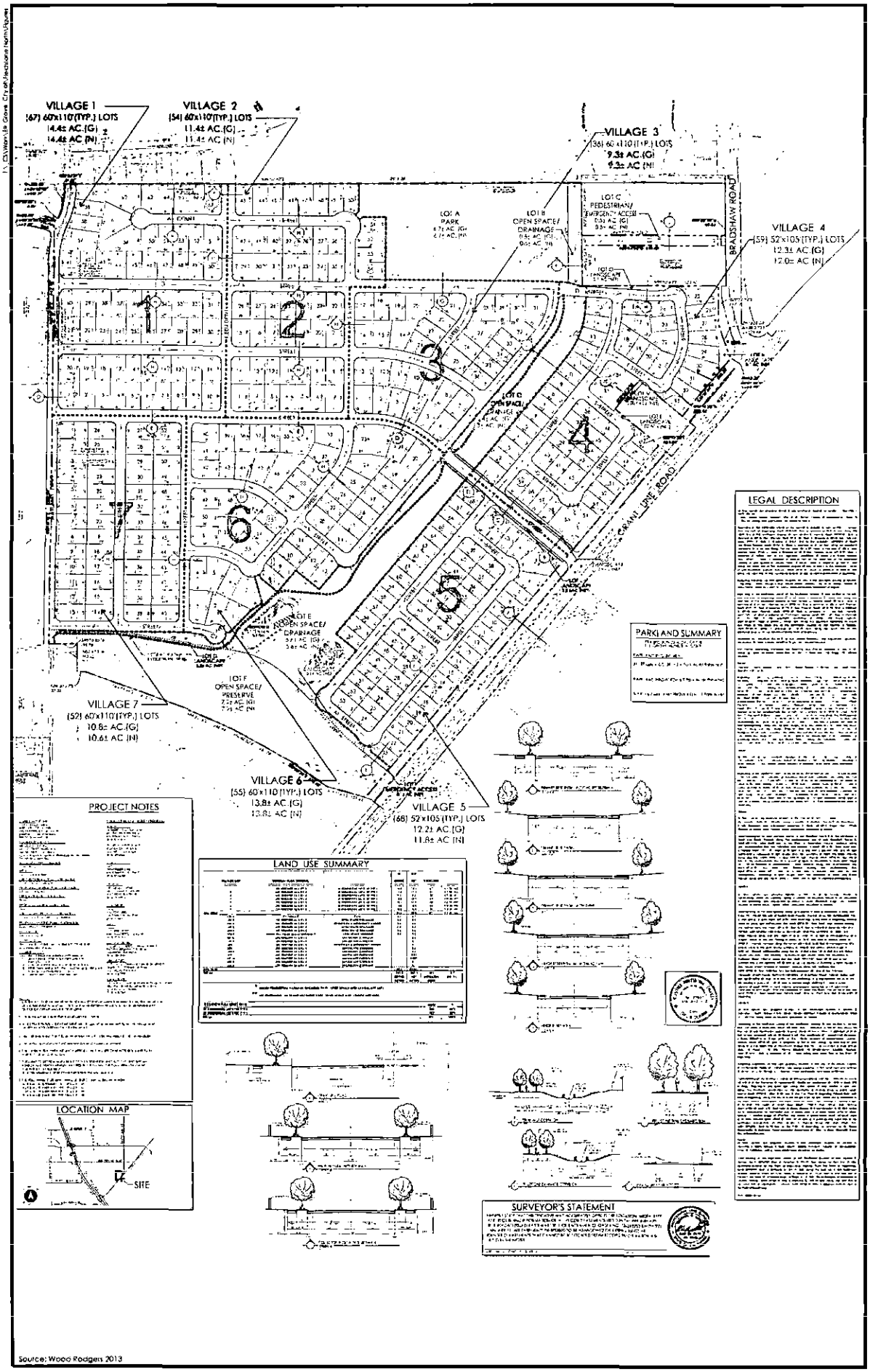
DESIGNATION	LAND USE	EXISTING	PROPOSED	DIFFERENCE
RESIDENTIAL 5 ac LOTS	RESIDENTIAL 5 ac LOTS	25.2	0	- 25.2
RESIDENTIAL 2-4	RESIDENTIAL 2-4 DU/AC	35.5	0	- 35.5
RESIDENTIAL 4	RESIDENTIAL 4 DU/AC	23.6	0	- 23.6
RESIDENTIAL 4-6	RESIDENTIAL 4-6 DU/AC	0	0.0	0.0
RESIDENTIAL 5	RESIDENTIAL 5 DU/AC		93.2	+ 93.2
PARKS	PARKS	8.0	6.7	- 1.3
OPEN SPACE-DRAINAGE	DRAINAGE CORRIDOR	11.6	0	- 11.6
OPEN SPACE-WETLANDS	WETLAND CORRIDOR	3.2	7.2	+ 4.0
		107.1 AC	107.1 AC	0

Source: Wood Rodgers 2013

0 250 500
FEET

N

Figure 3
Specific Plan Amendment
PMC



Source: Wood Rodgers 2013

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Figure 4
Tentative Subdivision Map

PMC

3.0 ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Project Title:

Fieldstone North

2. Lead Agency Name and Address:

City of Elk Grove
Development Services Department
8401 Laguna Palms Way
Elk Grove, CA 95758

3. Contact Person and Phone Number:

Gerald Park, Senior Planner
8401 Laguna Palms Way
Elk Grove, CA 95758
(916) 478-3671

4. Project Location:

The Project site is located west of the intersection of Bradshaw Road and Grant Line Road in the eastern portion of the City of Elk Grove. The site is identified by Assessor's Parcel Number (APN) 134-0110-154 and is located within the East Elk Grove Specific Plan (EEGSP) area, which was approved in 1995.

5. Project Sponsor's Name and Address:

Thad Johnson
Pappas Investments
2020 L Street, 5th Floor
Sacramento, CA 95814

6. General Plan Designation:

Rural Residential, Estate Residential, and Low Density Residential

7. Description of Project:

The proposed Project is requesting entitlements for a General Plan Amendment, Specific Plan Amendment, Rezone, Large-Lot Tentative Subdivision Map, and Small-Lot Tentative Subdivision Map. The entitlements would allow for the development of 391 residential units on 107.1 acres.

8. Surrounding Land Uses and Setting:

The Project site is surrounded by land designated for suburban residential uses to the north, west, and south. Lands at the northwest corner of the Project site have already been developed. Lands to the north, west, and south have been

approved for residential development. Lands east of the Project site are occupied by rural residential and agricultural uses. The former Sunset Skyranch Airport is located directly adjacent to the Project site on the east side of Grant Line Road.

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages. Potentially significant impacts that are mitigated to "Less Than Significant" are not shown here.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology and Soils
☐ Greenhouse Gas Emissions	☐ Hazards/Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

C. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because of the incorporated mitigation measures and revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Gerald Park
Signature

10/25/13
Date

Gerald Park
Printed Name

Senior Planner
Title

D. EVALUATION OF ENVIRONMENTAL IMPACTS

Each of the responses in the following environmental checklist take account of the whole action involved, including project-level, cumulative, on-site, off-site, indirect, construction, and operational impacts. A brief explanation is provided for all answers and supported by the information sources cited. As noted above, this is a supplement to the East Elk Grove Specific Plan EIR that evaluates the extent to which the analysis in that EIR adequately analyzes potential effects of the Project as currently proposed.

1. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone).

2. A "Less Than Significant Impact" applies when the proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.

3. A "Less Than Significant Impact With Mitigation Incorporated" applies when the proposed project would not result in a substantial and adverse change in the environment after additional mitigation measures are applied.

4. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

5. "New Impact or Increase Severity of Previous Significant Impact?" This column states whether the proposed Project would result in any of the conditions described in CEQA Guidelines Section 15162 requiring preparation of a subsequent EIR.

4.0 ENVIRONMENTAL ANALYSIS

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
1. AESTHETICS. Would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	No
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	No
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	No
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐	No

EXISTING SETTING

CITY OF ELK GROVE

Dominant visual features within the City of Elk Grove include urbanized land uses, open sections of the valley floor, agricultural land uses, rivers and creeks, and various species of trees. Because the City is topographically flat, views of these resources are available from roadways throughout the City. Oak trees, streams, creeks, and rivers are among the most significant natural visual features in Elk Grove. In addition, the Stone Lakes National Wildlife Refuge, the Sacramento River, and the Cosumnes River are located just outside of the City in unincorporated Sacramento County. Distant views of the Sierra Nevada and Coastal ranges can be visible from the City under clear conditions (Elk Grove 2003b, p. 4.13-1).

PROJECT SITE

The Project site is undeveloped. Vegetation on-site is mostly non-native grass remaining from the dryland farming. A riverine seasonal wetland bisects the Project site into the eastern and western sides. Elk Grove Creek is located at the southern portion of the Project site, along with a stand of less than a dozen trees and sparse riparian vegetation.

AESTHETIC CHARACTER OF THE SURROUNDING AREA

Residential development exists to the north and northwest of the Project site, and the Sonoma Creek subdivision has been developed to the southwest. Sonoma Creek is not directly adjacent to the Project site but can be seen from the site. Areas to the west and south, while not yet developed, are planned and approved for residential development. Two lots near the northeast portion of the Project site, but not located within the Project site, are currently developed with

rural residential uses. Another rural residential lot is located west of Grant Line Road and is entirely surrounded by the Project site. As such, the visual character of the surrounding area to the north, west, and south is considered urban and/or in the process of urbanizing.

East of Grant Line Road are rural residential and agricultural uses in unincorporated Sacramento County, as well as the former Sunset Skyranch Airport. The Project site is the location where the visual character of the surrounding area begins to transition from urban and residential uses to the west of Grant Line Road to agricultural and rural to the east of Grant Line Road. The aesthetic character of Grant Line Road, which provides the main arterial access to the area, includes a mix of urban development close to State Route (SR) 99 and a transition to agricultural and rural residential uses as one travels east from the Project site.

SCENIC VISTAS AND STATE SCENIC HIGHWAYS

There are no scenic vistas in the City of Elk Grove (Elk Grove 2003b). Furthermore, there are no officially designated state scenic highways in the City or in the surrounding area (Caltrans 2013).

NIGHTTIME LIGHTING AND DAYTIME GLARE

Currently, there are no sources of nighttime lighting or daytime glare on the Project site, as it is undeveloped. The only source of nighttime lighting in the vicinity of the Project site is the single-family residential development located to the north and southwest within the EEGSP. Areas east of the Project site are characterized by agricultural uses and rural development, which produce low levels of nighttime lighting. The undeveloped land to the south and west currently includes no sources of nighttime lighting.

The areas surrounding the Project site do not contain sources of daytime glare, which generally results from commercial and industrial developments that use reflective building materials.

PROJECT IMPACTS AND MITIGATION MEASURES

a–b) **No Impact.** There are no scenic vistas or designated state scenic highways in the vicinity of the Project site. Therefore, there is no impact. **There is no new or substantially more severe significant impact.**

c) **Less Than Significant Impact.** The EEGSP EIR assessed the potential for the EEGSP to affect the aesthetic character of the surrounding areas, in particular the Old Town Elk Grove Special Planning Area (SPA). The EIR disclosed that due to the large nature of the EEGSP area, it would be very apparent that the additional activity resulting from the EEGSP could affect the Special Planning Area's character. The EEGSP EIR provided mitigation that required development within the EEGSP Town Center to keep with the "old downtown" character found in Old Town Elk Grove. The EIR did not require mitigation for changes in visual character that would result from the large-scale development of residential uses throughout the remainder of the EEGSP area.

The Project is surrounded by existing and planned residential development to the north, west, and southwest. These homes can be described generally as one- and two-story structures with sloped roofs, garages, and landscaping in the front and along public streets. The public street improvements include sidewalks, planting areas, and streetlights. The low density residential currently approved for the Project site is less than that of the surrounding development and was originally approved due to the land use restrictions associated with operation of the former Sunset Skyranch Airport. The proposed density and

intensity of development is consistent with the other development in the EEGSP. The proposed Project would not result in substantial changes to visual character compared to those previously disclosed in the adopted EIR.

The proposed Project would allow for future residential development in an established residential area, and development of the Project site would be required to comply with the City's Zoning Code and Design Guidelines as well as mitigation measures established in the MMRP for the adopted EEGSP EIR. While the proposed Project would increase the density and intensity of residential development above that in the EEGSP, the EEGSP EIR has already considered the initial change of the Project site from rural agriculture to suburban uses. In addition, while an increase in density on the project site was not analyzed in the EEGSP EIR, the EEGSP considered the potential for the removal of the arrival/departure zone, assuming development of the property at densities consistent with surrounding development. The proposed change will result in development consistent with the existing development in the EEGSP adjacent to or near the proposed Project. The increase in density is considered a minor incremental change to the EEGSP. Therefore, because the proposed Project would not result in a substantial increase in the severity of this impact, the previous EIR adequately addresses this impact. **There is no new or substantially more severe significant impact.**

d) **Less Than Significant Impact.** Implementation of the proposed Project will introduce new light sources onto the currently undeveloped Project site. Nighttime lighting levels on the Project site will increase over current nonexistent lighting levels and could result in adverse effects to adjacent land uses through the "spilling over" of light into these areas and "sky glow" conditions. Although the proposed Project includes more residential units per acre than assumed in the EEGSP EIR, the Project would be consistent with all of the other land uses envisioned by the EEGSP, which anticipated residential development in this portion of the EEGSP area. Residential development of the Project site was also assumed in the Elk Grove General Plan (2003a), and the environmental impacts of urbanization of the EEGSP area were analyzed in the Elk Grove General Plan Volume 1: Draft Environmental Impact Report (2003b). Development on the Project site will be subject to the City's Zoning Code, which contains outdoor lighting standards that include shielding requirements, maximum level of illumination, and height of outdoor light fixtures. 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 following guideline for residential development for lighting would apply to the Project:

> "23) Street lighting along local residential streets shall be designed at a pedestrian scale with a maximum height of 14 feet."

In addition, the following guidelines for nonresidential development would apply to the park, roadways, and landscaping located within the Project site, which would aid in reducing adverse impacts associated with lighting:

> "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."

Compliance with applicable City regulations would ensure that lighting impacts would remain less than significant even with the increase in density and intensity on the Project site. Therefore, because the proposed Project would not result in a substantial increase in the severity of this impact, the EEGSP EIR adequately addresses this impact. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
2. AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☐	☒	No
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	No
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526 and by Government Code Section 51104(f)), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒	No
d) Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☒	No
e) Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use?	☐	☐	☒	☐	No

EXISTING SETTING

As of 2010, Sacramento County contained approximately 211,744 acres of agricultural land designated as Important Farmland by the Farmland Mapping and Monitoring Program (FMMP). FMMP is a non-regulatory program within the California Department of Conservation (DOC) that produces Important Farmland maps and statistical data used for analyzing impacts on California's agricultural resources. The Important Farmland maps identify five agriculture-related categories—Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land—rated according to soil quality and irrigation status. The FMMP also includes categories from Urban and Built-Up Land and Other Land (DOC 2013).

The majority of agricultural land uses in the City are considered fallow (vacant or underutilized). Few crops are grown in the City itself, and no major commercial agricultural operations occur within the City limits, though small family farms do exist. Much of the remaining agricultural land uses are expected to be converted to urban land uses as the City continues to develop. Although the City's General Plan designates a large area of the City (generally east of Bradshaw Road) for rural uses, the small parcel sizes in this area will most likely limit agricultural uses to "hobby" farming, the raising of animals either for personal enjoyment or on a small commercial scale, or the growing of specialty crops such as nursery plants.

The 2009 Important Farmland Map for Sacramento County designates the proposed Project site as Other Land and the majority of the surrounding sites to the north, west, and south as either Other Land or Urban and Built-Up Land. The map also confirms that the Project site is not under Williamson Act contract (DOC 2009).

PROJECT IMPACTS AND MITIGATION MEASURES

a) **No Impact.** The proposed Project site is designated by the FMMP as Other Land. *Therefore, implementation* of the proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of *Statewide Importance* to a nonagricultural use, and no impact would occur. **There is no new or substantially more severe significant impact.**

b) **No Impact.** The Project site is not under a Williamson Act contract. There are lands to the east of the Project site that are under Williamson Act contracts. While the increased density associated with the proposed Project would result in 213 more homes than assumed in the EEGSP EIR, the additional housing is not expected to interfere with nearby zoning for agricultural uses or Williamson Act contracts. In addition, lands to the east of Grant Line Road are outside of Sacramento County's Urban Services Boundary and are therefore expected to remain in agricultural production, enabling those lands to maintain their Williamson Act contract status. The EEGSP EIR considered the conversion of the Project site to nonagricultural use. Because housing is approved for the Project area as part of the EEGSP, and the proposed Project only increases the density of the housing analyzed in the EEGSP EIR, the proposed Project would not result in conflicts with existing zoning for agricultural uses or a Williamson Act contract that were not previously considered. Because the proposed Project would not result in a substantial increase in the severity of this impact, the previous EIR adequately addresses this impact. **There is no new or substantially more severe significant impact.**

c) **No Impact.** Neither the City of Elk Grove nor Sacramento County contains any land zoned for *forestland, timberland,* or timberland production. Therefore, no impact would occur. **There is no new or substantially more severe significant impact.**

d) **No Impact.** Neither the City of Elk Grove nor Sacramento County contains any forestland other than urban forest. Therefore, no impact would occur. **There is no new or substantially more severe significant impact.**

e) **Less Than Significant Impact.** The placement of nonagricultural uses adjacent to agricultural uses can result in conflicts that inadvertently place growth pressure on agricultural lands to convert to urban uses. Although the Project site is defined as Other Land and does not include any farmland, lands to the east of the Project site are in unincorporated Sacramento County and are designated by the FMMP as Prime Farmland. Even so, implementation of the proposed Project would not be expected to

place pressure on this farmland to convert to nonagricultural uses, as the proposed Project is consistent with the development of land as identified within the EEGSP, which anticipated a conversion of agricultural land uses to urban development. In addition, lands to the east of Grant Line Road are outside of Sacramento County's Urban Service Boundary, so the County, which has jurisdiction over those areas, is unlikely to allow for urban growth east of Grant Line Road. Therefore, the proposed Project would not involve changes in the existing environment that could indirectly result in the conversion of farmland to nonagricultural use. The previous EIR adequately addresses this impact, and **there is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	No
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐	No
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under applicable federal or state ambient air quality standards?	☐	☐	☒	☐	No
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	No
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒	No

EXISTING SETTING

REGIONAL SETTING

The proposed Project is located in the Sacramento Valley Air Basin (SVAB), which is under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (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.

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).

LOCAL SETTING

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 (NO_2), sulfur dioxide (SO_2), and lead 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 Elk Grove region, ozone and PM are of particular concern (PM equal to or less than 10 microns is referred to as PM_{10}, and PM less than 2.5 microns in diameter is known as $PM_{2.5}$).

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, PM_{10}, and $PM_{2.5}$ were obtained from a nearby monitoring station located in the City of Sacramento (Sacramento-T Street air monitoring station) (see **Table 1**). 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 1 summarizes the last three years of published data from the Elk Grove-Bruceville Road monitoring station and the Sacramento-T Street air monitoring station. As depicted in **Table 1**, state and federal ozone and PM standards have been exceeded on several occasions during the last three years of available data.

TABLE 1
AMBIENT AIR QUALITY MONITORING DATA FOR THE CITY OF ELK GROVE

Pollutant Standards	2010	2011	2012
Elk Grove-Bruceville Road Air Quality Monitoring Station			
Ozone			
Max 1-hour concentration (ppm)	0.106	0.097	0.093
Max 8-hour concentration (ppm) (state/federal)	0.089 / 0.089	0.081 / 0.080	0.087 / 0.086
Number of days above state 1-hr standard	1	1	0
Number of days above state/federal 8-hour standard	6 / 2	6 / 1	11 / 5
Sacramento-T Street Air Quality Monitoring Station			
Ozone			
Max 1-hour concentration (ppm)	0.092	0.100	0.104
Max 8-hour concentration (ppm) (state/federal)	0.74 / 0.74	0.87 / 0.87	0.93 / 0.92
Number of days above state 1-hr standard	0	1	1
Number of days above state/federal 8-hour standard	1 / 0	5 / 1	9 / 4
Respirable Particulate Matter (PM_{10})			
Max 24-hour concentration (µg/m3) (state/federal)	53.9 / 53.5	42.2 / 38.8	36.7 / 36.2
Number of days above state/federal standard	6.1 / 0	0 / 0	0 / 0
Fine Particulate Matter ($PM_{2.5}$)			
Max 24-hour concentration (µg/m3) (state/federal)	37.0 / 30.6	50.5 / 50.5	40.8 / 27.1
Number of days above state/federal standard	– / 0	– / 18.4	– / 0

Source: CARB 2013a
µg/m³ = micrograms per cubic meter; ppm = parts per million
– Insufficient or no data currently available to determine the value

PROJECT IMPACTS AND MITIGATION MEASURES

a) **Less Than Significant Impact.** 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.

Sacramento County, and thus Elk Grove, is classified as a nonattainment region for both federal and state ozone, PM_{10}, and $PM_{2.5}$ standards (CARB 2013b). Since Sacramento County is classified a nonattainment area, the SMAQMD is required to submit air quality plans and rate-of-progress milestone evaluations in accordance with the federal Clean Air Act. The SMAQMD air quality attainment plans and reports, which include the *Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan* (2008) and *PM_{10} Implementation/Maintenance Plan and Re-Designation Request for Sacramento County* (2010), present comprehensive strategies to reduce the ozone precursor pollutants, reactive organic gases (ROG) and nitrous oxides (NO_x), as well as PM emissions from

stationary, area, mobile, and indirect sources. *The Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan* includes the information and analyses to fulfill Clean Air Act requirements for demonstrating reasonable further progress toward attaining the 8-hour ozone national ambient air quality standards (NAAQS) for the Sacramento region. In addition, this plan establishes an updated emissions inventory and maintains existing motor vehicle emission budgets for transportation conformity purposes. The *PM_{10} Implementation/Maintenance Plan and Re-Designation Request for Sacramento County* attempts to fulfill the requirements for the US Environmental Protection Agency (EPA) to redesignate Sacramento County from nonattainment to attainment of the PM_{10} national ambient air quality standards.

According to SMAQMD guidance (2011a), if the Project results in a change in a designated land use and corresponding substantial increases in vehicle miles traveled (VMT), the resultant increase in VMT may be unaccounted for in regional emissions inventories contained in the regional air quality control plans described above, which are based on local planning documents and general plans. Substantial increases in VMT that are not accounted for in the emissions inventory of these air quality plans may conflict with these air quality plans and therefore result in a contribution to the region's existing air quality nonattainment status.

The proposed Project is requesting a General Plan Amendment, Specific Plan Amendment, and Rezone. These proposed entitlements will allow for the development of 391 residential uses on 107.1 acres, a 213-unit increase over the 178 units that were approved in the EEGSP.

According to the trip generation rates identified in the transportation impact study (Fehr & Peers 2013) prepared for the Project, the additional 213 units will generate an additional 2,025 daily traffic trips. The SMAQMD (2008) estimates a total of 69 million VMT in Sacramento County in 2015 and 75 million VMT in Sacramento County in 2020. If each of the 2,025 daily traffic trips spanned 20 miles, the result would be 40,511 VMT, which is an increase of 0.06 percent of the estimated VMT in 2015.

Although the Project would result in an increase in trips compared to that analyzed in the EEGSP EIR, the resultant VMT from trips generated by the Project would not constitute a substantial increase in VMT from that anticipated in the applicable air quality control plans and the Project would not conflict with the *Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan* or the *PM_{10} Implementation/Maintenance Plan and Re-Designation Request for Sacramento County*. This impact is less than significant. **There is no new or substantially more severe significant impact.**

b) **Less Than Significant Impact With Mitigation Incorporated.** State and federal air quality standards are often exceeded in many parts of the SVAB. A discussion of the Project's potential short-term construction-period and long-term operational-period air quality impacts is provided below.

CONSTRUCTION EMISSIONS

Three basic sources of short-term emissions would be generated by the proposed Project: the operation of 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, and construction vehicle traffic, as well as wind blowing over

exposed soils, would generate exhaust emissions and fugitive particulate matter emissions that would affect local air quality at various times during construction. Effects would 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 would be subject to SMAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals for control of dust during 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.

In addition, the City's Land Grading and Erosion Control Code requires projects in Elk Grove disturbing 350 cubic yards or more of soil or 1 or more acres of land to prepare an erosion and sediment control plan specifying best management practices (BMPs) for erosion and sediment control, and provides legal authority to Elk Grove for inspections and enforcement needed to ensure compliance with the ordinance.

The SMAQMD has established methods to quantify air emissions associated with construction activities. Emissions would vary from day to day, depending on the level of activity, the specific type of construction activity occurring, and, for fugitive dust, prevailing weather conditions. The construction air quality emissions are summarized in **Table 2**.

TABLE 2
CONSTRUCTION-RELATED CRITERIA POLLUTANT AND PRECURSOR EMISSIONS
(POUNDS PER DAY)

Construction Phases	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO_2)	Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
Construction of 391 Units	80.5	80.8	52.9	0.0	11.4	7.3
SMAQMD Potentially Significant Impact Threshold	–	85 pounds/day	–	–	–	–
Exceed SMAQMD Threshold?	–	**No**	–	–	–	–

Source: CalEEMod version 2013.2. Emissions quantification accounts for SMAQMD Rule 403 requirement to apply water for dust control as well as SMAQMD Rule 442, which limits ROG content in architectural coatings. The Project development footprint accounts for 22 acres of proposed open space. Refer to Appendix A for model data outputs.

As shown in **Table 2**, Project emissions resulting from construction would not exceed the SMAQMD significance criterion of 85 pounds per day of NOx.

The proposed Project has the potential to exceed the PM_{10} standard. While construction impacts are temporary and would cease once construction is completed, they nevertheless would have an effect on particulate matter emissions while such activities occur. The SMAQMD provides screening criteria that can also be used for the evaluation of construction-generated PM_{10}, based on the overall maximum daily area of disturbance associated with proposed projects. While the Project would be required to prepare an erosion and sediment control plan pursuant to the City's Land Grading and Erosion Control

Code if Project construction would disturb 350 or more cubic yards of soil or more than 1 acre, in accordance with the SMAQMD criteria described above, areas of daily disturbance in excess of SMAQMD screening criteria (15 acres) would be considered potentially significant. Mitigation measure AIR-1 ensures that the area of disturbance for future construction does not exceed 15 acres per day.

OPERATIONAL EMISSIONS

The SMAQMD has also established significance thresholds to evaluate the potential impacts associated with long-term Project operations (SMAQMD 2011a). Regional air pollutant emissions associated with Project operations include area source emissions, energy-use emissions, and mobile source emissions. Area source emissions comprise emissions from fuel combustion from space and water heating, landscape maintenance equipment, evaporative emissions from architectural coatings and consumer products, and unpermitted emissions from stationary sources. Energy-use emissions comprise emissions from on-site natural gas usage, and mobile source emissions comprise emissions from automobiles.

Operational area source emissions, energy-use emissions, and mobile source emissions (e.g., trucks, cars, parking lot sweepers) for the proposed Project were calculated using the CalEEMod air quality model (**Appendix A**). As shown in **Table 3**, the Project's net emissions would not exceed SMAQMD thresholds for NOx and ROG. 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. Regional operations emissions would not result in a significant long-term regional air quality impact.

TABLE 3
LONG-TERM UNMITIGATED OPERATIONAL EMISSIONS (POUNDS PER DAY)

Operations	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO_2)	Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
Summer Emissions – Pounds per Day (Unmitigated)						
391 Single-Family Residential Units	52.5	27.7	162.8	0.3	21.0	6.1
Winter Emissions – Pounds per Day (Unmitigated)						
391 Single-Family Residential Units	55.6	31.1	167.3	0.2	21.0	6.1
SMAQMD Potentially Significant Impact Threshold	65 pounds/day	65 pounds/day	–	–	–	–
Exceed SMAQMD Threshold?	No	No	–	–	–	–

Source: CalEEMod version 2013.2. Trip Generation rates per the Transportation Impact Study (Fehr & Peers 2013) prepared for the Project. Refer to Appendix A for model data outputs.

Also as shown in **Table 3**, Project emissions resulting from long-term operations would not exceed the SMAQMD significance criteria of 65 pounds per day of either ROG or NOx. Mitigation measure **AIR-1** limits construction ground disturbance to 15 acres per day,

which would ensure the Project would not exceed SMAQMD's criterion for PM_{10}. Therefore, operational-related air quality impacts will be considered less than significant. **There is no new or substantially more severe significant impact.**

Mitigation Measures

AIR-1 To ensure generation of PM_{10} does not exceed standards, ground-disturbing activities during construction shall not exceed the SMAQMD's screening criterion of 15 acres on any day.

Timing/Implementation: *During construction activities*

Enforcement/Monitoring: *City of Elk Grove Planning Department*

c) **Less Than Significant Impact.** Due to the region's nonattainment status for ozone and PM_{10}, the SMAQMD considers projects that are both consistent with all applicable air quality plans, which are intended to bring the basin into attainment for all criteria pollutants, and below SMAQMD significance thresholds of the ozone precursor pollutants (i.e., ROG and NO_x), to have less than significant cumulative impacts. As discussed in Item a), the proposed Project would not conflict with either the *Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan* or the *PM_{10} Implementation/Maintenance Plan and Re-Designation Request for Sacramento County* since the increase in VMT by the Project represents a small fraction of the estimated VMT. As discussed in Item b), predicted long-term operational emissions attributable to the proposed Project will not exceed SMAQMD significance thresholds. As such, cumulative impacts would be less than significant per the SMAQMD significance threshold since the Project would not conflict with applicable air quality plans or exceed SMAQMD significance thresholds. Therefore, the Project's contribution would not be cumulatively considerable, and the impact would be considered less than significant. **There is no new or substantially more severe significant impact.**

d) **Less Than Significant Impact.** Sensitive land uses are generally defined as locations where people reside or where the presence of air emissions could adversely affect the use of the land. Typical sensitive receptors include residents, schoolchildren, hospital patients, and the elderly. The Elk Grove General Plan considers residences to be "sensitive receptors" in relation to air quality issues. The Project site is located within the EEGSP area, which anticipated residential, commercial, and industrial land uses. There are currently residential land uses to the north of the Project site.

Air Toxics

The Project would not be a source of air toxics as it proposes residential development, which does not generate air toxics. However, construction activities would involve the use of a variety of gasoline- or diesel-powered equipment that emits exhaust fumes. Residents to the north could be exposed to nuisance dust and heavy equipment emission odors (i.e., diesel exhaust) during construction. However, the duration of exposure would be short and exhaust from construction equipment dissipates rapidly. In addition, construction activities would be subject to SMAQMD Rule 403 described above, which requires taking reasonable precautions, such as using water or chemicals for control of dust during construction operations, the construction of roadways, or the clearing of land, to prevent the emissions of the air toxic fine particulate matter.

Implementation of Rule 403 would ensure the Project would result in less than significant air toxic–related impacts during construction.

According to the SMAQMD, when a project includes development of new sensitive receptors, such as residential development, all sources of air toxics that could potentially affect the proposed development within a half mile (2,640 feet) of the proposed project site should be analyzed. According to CARB's (2004) Community Health Air Pollution Information System, there are no sources of toxic air contaminants with a half mile of the proposed Project site. This search was augmented by the EPA's (2010) National Air Toxic Program Release Chemical Report, which identifies the source of air toxics nearest to the Project site at Dwight Road over 6.5 miles to the northwest. Therefore, the Project would not locate a residential neighborhood in the vicinity of a stationary air toxic source.

Freeways and major roadways are another source of air toxics. These roadways are sources of diesel particulate matter (DPM), which has been listed as a toxic air contaminant by CARB. The SMAQMD (2011b) has prepared the Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, which was updated in March 2011. This protocol sets a screening threshold to determine if a proposed sensitive land use would be negatively affected by its location adjacent to a freeway and/or major roadway. The protocol recommends that sensitive land uses be sited no closer than 500 feet from a high traffic roadway, defined as a freeway with greater than 100,000 vehicles per day or roadway with greater than 50,000 vehicles per day. The Project site is approximately 9,500 feet east of State Route 99 and therefore greater than the SMAQMD 500-foot screening distance. While the Project proposes to locate a sensitive land use adjacent to Grant Line Road, that roadway is not considered a major roadway, as it only experiences an average of 32,928 vehicle trips per day between Calvine Road and the proposed Project site (Elk Grove 2013a). Therefore, future receptors would not be negatively affected by air toxics generated on freeways or major roadways.

Carbon Monoxide Hotspots

Carbon monoxide (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 during the peak commute hours. Modeling is therefore typically conducted for intersections that are projected to operate at unacceptable levels of service during peak commute hours.

The SMAQMD (2011a) provides a project-level screening procedure to determine whether detailed CO hotspot modeling is required for a proposed development project. 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, 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 level of service (LOS) to LOS E or F;[1] or

- The Project would not contribute additional traffic to an intersection that already operates at LOS of E or F.

As stated in subsection 16, Transportation/Traffic, the proposed Project would not result in any level of service at E or lower at the traffic facilities analyzed [see Issue a) in subsection 16, Transportation/Traffic]. Therefore, this impact is considered less than significant since the proposed Project would not result in traffic facilities operating at poor levels of service.

The proposed Project would result in less than significant impacts concerning the exposure of people to substantial amounts of air pollutant concentrations. **There is no new or substantially more severe significant impact.**

e) **No Impact.** According to the SMAQMD, land uses commonly considered to be potential sources of odorous emissions include wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants. No major sources of odors were identified in the vicinity of the Project site that could potentially affect proposed on-site residential land uses. In addition, implementation of the proposed Project would not result in the development or long-term operation of any on-site sources of odors due to its nature as a residential land use. No impact would occur. **There is no new or substantially more severe significant impact.**

[1] Level of service (LOS) is a measure used by traffic engineers to determine the effectiveness of transportation infrastructure. LOS is most commonly used to analyze intersections by categorizing traffic flow with corresponding safe driving conditions. LOS A is considered the most efficient level of service and LOS F the least efficient.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
4. BIOLOGICAL RESOURCES. Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐	No
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐	No
c) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐	No
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒	No
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒	No
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	No

As of January 1, 2013, the agency formerly known as the California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW). Some publications written prior to the change refer to the CDFG; therefore, this document refers to the CDFG and the CDFW, as appropriate, referring to the same state agency.

This section describes the existing biological resources including special-status species and sensitive habitat known to occur and/or have the potential to occur in the Project study area (PSA). In addition, a summary of the regulations and programs that provide protective measures to special-status species, an analysis of impacts to biological resources that could result from Project implementation, and a discussion of mitigation measures necessary to reduce impacts to a less than significant level, where feasible, is provided in this section.

ENVIRONMENTAL SETTING

Several steps were taken to characterize the environmental setting in the Project vicinity. First, Project-related documentation was reviewed to collect site-specific data regarding habitat suitability for special-status species, as well as the identification of potentially jurisdictional waters. Additional information was obtained from a variety of outside data sources as listed in the references section. Lastly, preliminary database searches were performed to identify special-status species with the potential to occur in the area.

Database searches were performed on the following websites:

- US Fish and Wildlife Service's (USFWS) Sacramento Office Species List (2013a)
- USFWS's Critical Habitat Portal (2013b)
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (2013)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (2013)

A search of the USFWS's Critical Habitat Portal database and Sacramento Office Species List's for the Elk Grove, California, US Geological Survey (USGS) 7.5-minute quadrangle and the eight surrounding quads (Sloughhouse, Clay, Florin, Bruceville, Galt, Buffalo Creek, Sacramento East, and Carmichael) was performed for the Project area to identify federally protected species and their habitats that may be affected by the proposed Project. In addition, a query of the CNDDB database was conducted to identify known occurrences for special-status species within a 1- and 5-mile radius of the proposed project. Lastly, the CNPS database was queried to identify special-status plant species with the potential to occur within the quadrangles mentioned above.

A biological resources assessment was conducted by Foothill Associates' biologists on August 8, 2013 (**Appendix B**). The 107.1-acre Project area is composed of agricultural land with disturbed annual grassland along the field perimeters. The site is relatively flat and the topography has been altered by repeated leveling and regular discing. Surrounding land uses include Grant Line Road to the east, agricultural fields and residential areas to the south and east, and residential areas to the north and west. A wetland delineation performed in 2013 (SPK-2011-00351; see **Appendix C**) determined the following features are on-site: vernal pools, depressional seasonal wetlands, riverine seasonal wetland, riverine seasonal marsh, and a reach of Elk Grove Creek.

SPECIAL-STATUS SPECIES

Candidate, sensitive, or special-status species are commonly characterized as species that are at potential risk, or actual risk to their persistence in a given area, or across their range. These species have been identified and assigned a status ranking by governmental agencies such as

the CDFW, the USFWS, and nongovernmental organizations such as the CNPS. The degree to which a species is at risk of extinction is the determining factor in the assignment of a status ranking. Some common threats to a species' or population's persistence include habitat loss, degradation, and fragmentation, as well as human conflict and intrusion. For the purposes of this biological review, special-status species are defined by the following codes:

1. Listed, proposed, or candidates for listing under the federal Endangered Species Act (50 Code of Federal Regulations [CFR] 17.11 – listed; 61 Federal Register [FR] 7591, February 28, 1996 candidates)

2. Listed or proposed for listing under the California Endangered Species Act (Fish and Game Code [FGC] 1992 Section 2050 et seq.; 14 California Code of Regulations [CCR] Section 670.1 et seq.)

3. Designated as Species of Special Concern by the CDFW

4. Designated as Fully Protected by the CDFW (FGC Sections 3511, 4700, 5050, 5515)

5. Species that meet the definition of rare or endangered under CEQA (14 CCR Section 15380) including CNPS List Rank 1B and 2

The query of the USFWS, CNPS, and CNDDB databases revealed 8 sensitive plant species and 17 special-status wildlife species, a total of 25 species, with the potential to occur in the Project vicinity. Table 1 in **Appendix D** summarizes each species identified in the database results, a description of the habitat requirements for each species, and conclusions regarding the potential for each species to be impacted by the proposed Project. Raw database results can also be found in **Appendix D**.

PROJECT IMPACTS AND MITIGATION MEASURES

a) **Less Than Significant Impact With Mitigation Incorporated.** The species or species groups identified below were determined to have the potential to be substantially adversely affected by Project-related activities, either directly or through habitat modifications. Impacts to these species would be considered a potentially significant impact. However, mitigation measures are presented below to reduce potential impacts to a less than significant level.

SPECIAL-STATUS PLANT SPECIES

Suitable habitat within the Project area may provide conditions suitable for special-status plant species, including dwarf downingia (*Downingia pusilla*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), legenere (*Legenere limosa*), and Sanford's arrowhead (*Sagittaria sanfordii*); therefore, the Project may result in adverse impacts to special-status plant species should they be present in areas proposed for disturbance. Due to the highly disturbed state of the Project site, it is unlikely that these special-status species persist; however, in order to ensure potential impacts are at a less than significant level, mitigation measure **BIO-1** shall be implemented.

Mitigation Measures

BIO-1 **Special-Status Plant Surveys.** The Project proponent shall retain a qualified biologist to perform focused surveys to determine the presence/absence of

special-status plant species with potential to occur in and adjacent to (within 25 feet, where appropriate) the proposed impact area, including construction access routes. These surveys shall be conducted in accordance with CDFW *Guidelines for Assessing Effects of Proposed Developments on Rare Plants and Plant Communities* (Nelson 1994). These guidelines require that rare plant surveys be conducted at the proper time of year, May-June, when rare or endangered species are both evident and identifiable. Field surveys shall be scheduled to coincide with known flowering periods, and/or during appropriate developmental periods that are necessary to identify the plant species of concern.

If the surveys do not find any state or federal listed plant species in or adjacent to (within 25 feet) the proposed impacts area, no further action is required. If any state- or federally listed, CNPS List 1, or CNPS List 2 plant species are found in or adjacent to (within 25 feet) the proposed impact area during the surveys, these plant species shall be avoided and the following mitigation measures shall be implemented:

1. In some cases involving state-listed plants, it may be necessary to obtain an incidental *take permit* under Section 2081 of the FGC (2081 permit). The Project proponent shall consult with the CDFW to determine whether a 2081 permit is required, and obtain all required authorizations prior to initiation of construction activities.

2. Before the approval of grading plans or any ground-breaking activity within the Project area, the Project proponent shall submit a mitigation plan concurrently to the CDFW and the USFWS (if appropriate) for review and comment. The plan shall include mitigation measures for the population(s) to be directly affected. Possible mitigation for impacts to special-status plant species can include implementation of a program to transplant, salvage, cultivate, or re-establish the species at suitable sites (if feasible) or through the purchase of credits from an approved mitigation bank, if available. The actual level of mitigation may vary depending on the sensitivity of the species, its prevalence in the area, and the current state of knowledge about overall population trends and threats to its survival. The final mitigation strategy for directly impacted plant species shall be determined by the CDFW and the USFWS (if appropriate) through the mitigation plan approval process.

3. Any special-status plant species that are identified adjacent to the Project area, but not proposed to be disturbed by the Project, shall be protected by barrier fencing to ensure construction activities and material stockpiles do not impact any special-status plant species. These avoidance areas shall be identified on Project plans.

Timing/Implementation: *Prior to the initiation of construction activities*

Enforcement/Monitoring: *City of Elk Grove Planning Department*

SPECIAL-STATUS INVERTEBRATES

Implementation of Project-related activities could result in the loss of vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*).

(NOTE: As acknowledged in the IS, this is a highly disturbed site.) These would be considered potentially significant impacts.

Potentially suitable vernal pool habitat for special-status tadpole shrimp and fairy shrimp species occurs on a small portion of the Project area. Wet and dry season surveys for invertebrates were conducted in 2005 using methods that generally follow the USFWS (1996) *Interim Survey Guidelines to Permittees for Recovery Permits under Section 10 (a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods*. No listed invertebrates were observed during surveys; however, these surveys are only valid for five years, making them out of date (Helm Biological Consulting 2005; see **Appendix E**). (NOTE: best available scientific information is that there are no shrimp.)

Implementation of Project-related activities may result in adverse impacts to these special-status invertebrate species should they be present in the small vernal pool area proposed for disturbance. In order to reduce potential impacts to a less than significant level, mitigation measure **BIO-2** shall be implemented. **There is no new or substantially more severe significant impact.**

Mitigation Measures

BIO-2 Consultation with US Fish and Wildlife Service

The Project proponent shall either assume presence of special-status vernal pool invertebrates or have a qualified biologist conduct a survey for Federally-listed Large Branchiopods (vernal pool fairy shrimp and vernal pool tadpole shrimp). If the survey concludes absence of vernal pool fairy shrimp and vernal pool tadpole shrimp, no further mitigation is required.

If special-status invertebrates are determined to be present, or if presence is assumed, the Project proponent shall mitigate consistent with the future Biological Opinion, mitigating with 1 acre of vernal pool preservation for every 1 acre of directly affected special-status shrimp habitat (1:1 ratio), as well as 1 acre of vernal pool creation for every 1 acre of directly affected special-status shrimp habitat (1:1 ratio). The preliminary jurisdictional determination identified 0.453 acre of vernal pools in the project footprint; therefore 0.453 acre of preservation and .0453 acre of creation. (NOTE: There is no City-adopted policy supporting the higher mitigation ratio, this is not critical habitat, this is not within the Mather Core recovery area, it is a highly disturbed site and there is no evidence of shrimp.)

Provided that the mitigation land satisfies the criteria set forth in both mitigation measure **BIO-7** and this mitigation measure, land acquired to meet the habitat mitigation requirements of this mitigation measure, and/or any additional habitat mitigation that is required by any governmental agency for any development project undertaken pursuant to the proposed Project, may occur within and also be counted toward the required waters of the United States obligation set forth in mitigation measure **BIO-7**.

Timing/Implementation: *Prior to the initiation of construction activities*

Enforcement/Monitoring: *City of Elk Grove Planning Department*

SPECIAL-STATUS BIRDS

Implementation of Project-related activities could result in the loss of populations or essential nesting or foraging habitat for special-status birds. This would be considered a potentially significant impact.

Based on the results of database searches and historic records, as well as known regional occurrences, four special-status bird species have the potential to occur on the Project site: burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), and white-tailed kite (*Elanus leucerus*). No sign of these species was found during the August 8, 2013, site visit.

The biological assessment determined that the density of vegetation along the margins of the riverine wetland areas on the Project site is enough to support a nesting population of blackbirds (Foothill Associates 2013). In addition, there are 17 records of tricolored blackbirds within 5 miles of the site, one of which is on-site. Therefore, Project activities could result in impacts to blackbird populations and habitat.

The entire Project site provides foraging habitat for special-status raptors such as Swainson's hawk and white-tailed kite. In addition, large trees on-site provide potential nesting habitat for these species. There are 31 records of Swainson's hawk and one record of white-tailed kite within 5 miles of the Project site (CDFW 2013). Implementation of Project activities will result in loss of foraging habitat for special-status raptors and may result in indirect impacts to potential nesting habitat. Though no records of burrowing owl occur within 5 miles of the Project site, Project implementation may result in the loss of western burrowing owls through destruction of active nesting sites and/or incidental burial of adults, young, and eggs, should they become established on-site.

Habitats on and adjacent to the Project site may provide suitable nesting habitat for birds protected under the Migratory Bird Treaty Act and Sections 3503, 3503.5 and 3800-3806 of the California Fish and Game Code. The removal of trees/vegetation during construction activities could result in noise, dust, human disturbance and other direct/indirect impacts that could result in the take of individuals or eggs on or in the vicinity of the project site.

Implementation of Project-related activities may result in adverse impacts to special-status bird species should they be present in areas proposed for disturbance. In order to reduce potential impacts to a less than significant level, mitigation measures **MM BIO-3** through **MM BIO-6** shall be implemented. **There is no new or substantially more severe significant impact.**

Mitigation Measures

BIO-3 **Swainson's Hawk Foraging Habitat.** The Project applicant shall acquire conservation easements or other instruments to preserve suitable foraging habitat for *Swainson's* hawk, as determined by the CDFW. The location of mitigation parcels as well as the conservation instruments protecting them shall be acceptable to the City. The amount of land preserved shall be governed by a 1:1 mitigation ratio for each acre developed at the Project site. The preservation of land shall be done prior to any site disturbance, such as clearing or grubbing, or the issuance of any permits for grading, building, or other site improvements,

whichever occurs first. In addition, the City may impose the following conservation easement content standards:

a) The land to be preserved shall conform with CDFW guidelines on suitable Swainson's hawk foraging habitat.

b) All owners of the mitigation land shall execute the document encumbering the land.

c) The document shall be recordable and contain an accurate legal description of the mitigation land.

d) The document shall prohibit any activity that substantially impairs or diminishes the land's capacity as suitable Swainson's hawk foraging habitat.

e) If the land's suitability as foraging habitat is related to existing agricultural uses on the land, the document shall protect any existing water rights necessary to maintain such agricultural uses on the land covered by the document, and retain such water rights for ongoing use on the mitigation land.

f) The applicant shall pay to the City a mitigation monitoring fee to cover the costs of administering, monitoring, and enforcing the document in an amount determined by the receiving entity, not to exceed 10 percent of the easement price paid by the applicant, or a different amount approved by the City Council, not to exceed 15 percent of the easement price paid by the applicant.

g) Interests in mitigation land shall be held in trust in perpetuity by the City or an entity acceptable to the City. The entity shall not sell, lease, or convey any interest in mitigation land which it shall acquire without the prior written approval of the City.

h) The City shall be named a beneficiary under any document conveying the interest in the mitigation land to an entity acceptable to the City.

i) If any qualifying entity owning an interest in mitigation land ceases to exist, the duty to hold, administer, monitor, and enforce the interest shall be transferred to the City or to another entity acceptable to the City.

j) Land used for Swainson's Hawk mitigation may also be used for other types of compatible mitigation (vernal pool, species, wetlands, etc.)

Before committing to the preservation of any particular land pursuant to this measure, the Project applicant shall obtain the City's approval of the land proposed for preservation.

Timing/Implementation: *Prior to construction activities*

Enforcement/Monitoring: *City of Elk Grove Planning Department*

BIO-4 **Burrowing Owl Preconstruction Surveys.** If clearing and construction activities would occur during the nesting period for burrowing owls (February 1–August 31), a qualified biologist shall conduct focused surveys for burrowing owls on the Project site within 30 days prior to construction initiation. Surveys shall be

conducted in accordance with the CDFG's *Staff Report on Burrowing Owl Mitigation*, published March 7, 2012. Surveys shall be repeated if Project activities are suspended or delayed for more than 15 days during nesting season.

If no burrowing owls are detected, no further mitigation is required. If active burrowing owls nest sites are detected, the Project proponent shall implement the avoidance, minimization, and mitigation methodologies outlined in the CDFW's *Staff Report on Burrowing Owl Mitigation* prior to initiating Project-related activities that may impact burrowing owls.

Timing/Implementation: *Prior to construction activities*

Enforcement/Monitoring: *City of Elk Grove Planning Department*

BIO-5 **Migratory Bird Surveys.** If clearing and/or construction activities would occur during the migratory bird nesting season (April 15–August 15), preconstruction surveys to identify active migratory bird nests shall be conducted by a qualified biologist within 14 days prior to construction initiation. Focused surveys must be performed by a qualified biologist for the purposes of determining presence/absence of active nest sites within the proposed impact area, including construction access routes and a 200-foot buffer (if feasible).

If active nest sites are identified within 200 feet of Project activities, the applicant shall impose a limited operating period (LOP) for all active nest sites prior to commencement of any Project construction activities to avoid construction- or access-related disturbances to migratory bird nesting activities. An LOP constitutes a period during which Project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur, and will be imposed within 100 feet of any active nest sites until the nest is deemed inactive by a qualified biologist. Activities permitted within and the size (i.e., 100 feet) of LOPs may be adjusted through consultation with the CDFW and/or the City.

Timing/Implementation: *Prior to construction activities*

Enforcement/Monitoring: *City of Elk Grove Planning Department*

BIO-6 **Raptor Surveys.** If clearing and/or construction activities would occur during the raptor nesting season (January 15–August 15), preconstruction surveys to identify active raptor nests shall be conducted by a qualified biologist within 14 days prior to construction initiation. Focused surveys must be performed by a qualified biologist for the purposes of determining presence/absence of active nest sites within the proposed impact area, including construction access routes and a 500-foot buffer (if feasible).

If active nest sites are identified within 500 feet of Project activities, the applicant shall impose an LOP for all active nest sites prior to commencement of any Project construction activities to avoid construction- or access-related disturbances to nesting raptors. An LOP constitutes a period during which Project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur, and will be imposed within 250 feet of any active nest sites until the nest is deemed inactive by a qualified biologist. Activities permitted within and

the size (i.e., 250 feet) of LOPs may be adjusted through consultation with the CDFW and/or the City.

Timing/Implementation: *Prior to construction activities*

Enforcement/Monitoring: *City of Elk Grove Planning Department*

b) **Less Than Significant Impact With Mitigation Incorporated.** Sensitive habitats include those that are of special concern to resource agencies and those that are protected under CEQA, Section 1600 of the FGC, and Section 404 of the CWA. Project-related activities have the potential to substantially adversely affect riparian habitat, vernal pools, or other sensitive natural communities identified in local or regional plans, policies, or regulations or by the CDFW or the USFWS. The jurisdictional delineation identified approximately 2.635 acres of waters within the Project site. Impacts to these resources would be considered a potentially significant impact. However, mitigation measure **BIO-7** requires no net loss of federally protected waters, which would reduce the potential impacts to a less than significant level. **There is no new or substantially more severe significant impact.**

Mitigation Measures

BIO-7 **No Net Loss of Federally Protected Waters.** If federally protected waters would be impacted by Project-related activities, the Project proponent shall ensure that the Project will result in no net loss of federally protected waters. No net loss can be achieved through impact avoidance, impact minimization, and/or compensatory mitigation, as determined in CWA Section 404 and 401 permits and/or 1602 Streambed Alteration Agreement. Evidence of compliance with this mitigation measure shall be provided prior to construction and grading activities for the proposed Project.

Provided that the mitigation land satisfies the criteria set forth in both mitigation measure **BIO-2** and this mitigation measure, land acquired to meet the waters of the United States requirements of this mitigation measure and/or any additional habitat mitigation that is required by any governmental agency for any development project undertaken pursuant to the proposed Project may occur within and also be counted toward the required habitat mitigation set forth in mitigation measure **BIO-2**.

Timing/Implementation: *Prior to construction*

Enforcement/Monitoring: *City of Elk Grove Planning Department*

c) **Less Than Significant Impact With Mitigation Incorporated.** A total of 2.635 acres of potential waters of the United States have been delineated within the site, including 0.453 acres of vernal pool, 0.018 acres of depressional seasonal wetland, 0.930 acres of riverine seasonal wetland, 0.057 acres of riverine seasonal marsh, and 1.177 acres of creek. The US Army Corps of Engineers issued a preliminary jurisdictional determination for the aquatic features delineated on the site on April 18, 2013 (SPK-2011-00351), concurring with the 2.635 acres of jurisdictional features on the Fieldstone North site (**Appendix C**). Impacts to these aquatic resources would be considered a potentially significant impact. However, mitigation measure **BIO-7** requires no net loss of federally protected waters, which would reduce the potential impacts to a less than significant

level. With the proposed mitigation measure, **there would be no new or substantially more severe significant impact.**

Mitigation Measures

Implement mitigation measure **BIO-7**.

d) **No impact.** Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas, such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range. No wildlife corridors for resident migratory wildlife species occur on or adjacent to the site. As a result, no impact to the movements of any native resident or migratory fish or wildlife species, or established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites would occur as a result of the proposed Project, and no mitigation is proposed. **There is no new or substantially more severe significant impact.**

e) **No Impact.** The proposed Project is subject to local policies, including the City of Elk Grove Municipal Code Chapter 19.12, Tree Preservation and Protection. Project activities would not conflict with local ordinances, and there would be no impact. **There is no new or substantially more severe significant impact.**

f) **No impact.** The PSA is located within the South Sacramento Habitat Conservation Plan (SSHCP) planning area; however, this plan has not been adopted to date. As a result, no conflict with an adopted HCP will occur, and no mitigation measures are proposed. **There is no new or substantially more severe significant impact.**

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
5. CULTURAL RESOURCES. Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5, respectively?	☐	☐	☐	☒	No
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in Public Resources Code Sections 21083.2 and 21084.1, and CEQA Guidelines Section 15064.5, respectively?	☐	☐	☒	☐	No
c) Directly or indirectly destroy a *unique* paleontological resource or site or unique geological feature?	☐	☐	☒	☐	No
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐	No

EXISTING SETTING

The City of Elk Grove General Plan Draft EIR (2003b) identifies 93 prehistoric and historic Native American archaeological sites within the City of Elk Grove General Plan Planning Area, which includes the City limits and surrounding area in unincorporated Sacramento County. The Project site is located within this Planning Area. Many, if not most, of these archaeological sites are village mounds located along rivers, creeks, and sloughs and around lakes. Some are known to contain human remains, and many others have the potential to contain human remains. In addition, there are 24 historic sites within the General Plan Planning Area, many of which are remnants of farms and ranches. Included among the historic sites is the Murphy's Ranch (Murphy's Corral) site, State Historic Landmark 680 and California Inventory of Historical Resources 182; the site of Joseph Hampton Kerr's home, California Inventory of Historical Resources 178 and Point of Historical Interest 001; the site of the Old Elk Grove Hotel, Point of Historical Interest 004; and the site of the first free library branch in California, California Historical Landmark No. 817 (Elk Grove 2003b). Old Town Elk Grove became nationally recognized as a historic district on March 1, 1988. It is listed as the Elk Grove Historic District on the National Register of Historic Places (NRHP). The only other site in the Planning Area listed in the NRHP is the Eastern Star Hall, located along the Sacramento River, approximately 1.5 miles north of the community of Hood (Elk Grove 2003b).

A cultural resource overview of the East Elk Grove Specific Plan area was conducted by Robert A. Gerry, Peak and Associates, Inc., in July 1994 (Elk Grove 1996). The overview concluded that no significant cultural resources were identified; structures appear to consist primarily of nondescript barns and relatively recent residences. Nonetheless, as detailed below, performance standards

adopted in the EEGSP shall be applied in the event significant resources are encountered during any development activities.

PROJECT IMPACTS AND MITIGATION MEASURES

a) **No Impact.** The site does not contain any known historic buildings or structures, or resources related to ethnic cultural value, or religious/sacred uses. Therefore, no impacts are anticipated to the resources.

b–d) **Less Than Significant Impact.** Archaeological and historical investigations for the EEGSP area did not identify any archaeological resources, cultural resources, or human remains, significant or otherwise, within the proposed Project site or surrounding area. Regardless, there are known archaeological resources in the City associated with Native American and Euro-American use and occupation of the area. Future construction activities envisioned by the proposed Project could result in the unanticipated discovery of archaeological and other cultural resources in the Project area, including human remains. Furthermore, as the City has the potential to contain paleontological resources, there is a possibility of the unanticipated discovery of paleontological resources during future ground-disturbing activities envisioned by the Project. Therefore, the Project could affect previously undiscovered significant archaeological, paleontological, or other cultural resources, including human remains.

General Plan Historic Resource Element Action HR-6-Action 1 states that in areas identified in the General Plan Background Report as having a significant potential for containing archaeological or paleontological artifacts, completion of a detailed on-site study is required and all recommended mitigation measures shall be implemented. Action HR-6-Action 1 addresses potential impacts to archaeological, paleontological, or other cultural resources, including human remains. As a proposed development project anticipated under the City's General Plan, this Project would have to comply with the policies and actions of the General Plan. Therefore, impacts to undiscovered archaeological, paleontological, or other cultural resources, including human remains, were considered in the EEGSP EIR and would be mitigated per Action HR-6-Action 1. Therefore, because the proposed Project would not result in a substantial increase in the severity of this impact, and this impact is less than significant. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
6. GREENHOUSE GAS EMISSIONS. Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	No
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	No

EXISTING SETTING

Since the early 1990s, scientific consensus holds that the world's population is releasing greenhouse gases (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 (CO_2), methane (CH_4), and nitrous oxide (N_2O), 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 GHG emissions beyond natural levels. The overabundance of GHGs in the atmosphere has led to a 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 greenhouse gas 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 global climate change, it is important to recognize the naturally occurring greenhouse effect and to define the type of GHG emissions that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. 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. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

REGULATORY FRAMEWORK

In 2006, California adopted AB 32, the Global Warming Solutions Act. AB 32 codifies the state's goal by requiring that the state's global warming emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on global warming emissions that has been phased in starting in 2012. In order to effectively implement the cap, AB 32 directs CARB to develop appropriate regulations and establish a mandatory reporting system to track and monitor global warming emissions levels.

At the present time, there are no adopted or recommended thresholds of significance established by federal, state, or local agencies/jurisdictions for the evaluation of GHG emissions and resultant impacts attributable to proposed development projects. Preliminary guidance from the Office of Planning and Research (OPR) and recent letters from the Attorney General critical of CEQA documents that have taken different approaches indicate that lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, and construction activities.

Addressing GHG generation impacts requires an agency to make a determination as to what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine if a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions (14 CCR Section 15064.4(a)).

In its Final Statement of Reasons for Regulatory Action accompanying the CEQA Amendments (FSOR), the California Natural Resources Agency (CNRA 2009) explains that quantification of GHG emissions "is reasonably necessary to ensure an adequate analysis of GHG emissions using available data and tools" and that "quantification will, in many cases, assist in the determination of significance." However, as explained in the FSOR, the revised Section 15064.4(b) assigns lead agencies the discretion to determine the methodology to quantify GHG emissions. The FSOR also notes that CEQA case law has long stated that "there is no iron-clad definition of 'significance.' Accordingly, lead agencies must use their best efforts to investigate and disclose all that they reasonably can concerning a project's *potential* adverse impacts."

Determining a threshold of significance for a project's climate change impacts poses a special difficulty for lead agencies. Much of the science in this area is new and is evolving constantly. At the same time, neither the state nor local agencies is specialized in this area, and there are currently no local, regional, or state thresholds for determining whether the proposed project has a significant impact on climate change. The CEQA Amendments do not prescribe specific significance thresholds but instead leave considerable discretion to lead agencies to develop appropriate thresholds to apply to projects within their jurisdiction.

As noted earlier, AB 32 is a legal mandate requiring that statewide GHG emissions be reduced to 1990 levels by 2020. In adopting AB 32, the legislature determined the necessary GHG reductions for the state to make in order to sufficiently offset its contribution to the cumulative climate change problem to reach 1990 levels. AB 32 is the only legally mandated requirement for the reduction of *greenhouse gases*. As such, compliance with AB 32 is the adopted basis upon which the agency can base its significance threshold for evaluating the project's GHG impacts. Therefore, for the proposed Project, consistency with the adopted Elk Grove Climate Action Plan (CAP) (Elk Grove 2013a) is used as the significance threshold concerning Project

generation of GHG emissions since the policy provisions contained in the CAP were prepared with the purpose of complying with the requirements of AB 32 and achieving the goals of the AB 32 Scoping Plan. The proposed Project would be considered to have a significant impact if it conflicts with the policies of the CAP.

PROJECT IMPACTS AND MITIGATION MEASURES

a–b) Less Than Significant Impact. Emissions resulting from implementation of the proposed Project have been quantified and presented in **Table 4**. Construction-generated GHG emissions were amortized over the estimated life of the Project (30 years). As shown in **Table 4**, the long-term operations of the proposed 391 residential units could produce an additional 5,585 metric tons of carbon dioxide equivalents (CO_2e) annually. This would contribute to a net increase in GHGs from the proposed Project.

TABLE 4
OPERATIONAL GHG EMISSIONS – METRIC TONS PER YEAR

Source	CO_2	CH_4	N_2O	CO_2e
Construction (amortized over 30 years of Project life)	127.5	0.03	0.00	128
Area	7	0.00	0.00	7
Energy	1,449	0.05	0.02	1,457
Mobile	3,754	0.15	0.00	3,757
Solid Waste	76	4.5	0.00	171
Water	58	0.03	0.02	65
Total	**5,471.5**	**5**	**0.04**	**5,585**

Source: CalEEMod version 2013.2. Trip Generation rates per the Transportation Impact Study (Fehr & Peers 2013) prepared for the Project. Refer to Appendix F for model data outputs.

The Elk Grove CAP is a strategic planning document that identifies sources of GHG emissions from within Elk Grove's boundary and reduces emissions through energy use, transportation, land use, water use, and solid waste strategies (referred to as "measures" in the CAP). The policy provisions contained in the CAP were prepared with the purpose of complying with the requirements of AB 32 and achieving the goals of the AB 32 Scoping Plan. A specific project proposal is considered consistent with the Elk Grove CAP if it complies with the GHG reduction measures contained in the adopted CAP.

The GHG reduction measures included in the Elk Grove CAP that apply to residential development and are mandatory are contained in **Table 5**, which also summarizes the extent to which the Project would comply with the strategies. The strategies listed in **Table 5** are already required under local or state regulations or are included as mitigation measures for the Project. With implementation of these strategies/measures, the Project's contribution to cumulative GHG emissions would be reduced.

TABLE 5
ELK GROVE CAP COMPLIANCE

Strategy	Project Compliance
Built Environment Measures	
BE-2 – Building Stock, New Construction Adopt CALGreen Tier 1 standards to require all new construction to achieve a 15 percent improvement over minimum Title 24 CALGreen energy requirements.	**Compliant** The proposed Project will be required to comply with the updated Title 24 standards, including the new 2010 California Building Code (CBC), for building construction. These standards require new buildings to reduce water consumption by 20 percent, which results in less energy consumption for pumping water.
BE-10 – On-Site Renewable Energy Installations **Fourth Action Item:** Require solar photovoltaic prewiring in all new residential development.	**Compliant** The Project will be required ensure the installation of solar-ready rooftops on each residential unit.
Resource Conservation Measures	
RC-1 – Waste Reduction **Fourth Action Item:** Expand the current construction and demolition ordinance to require 65 percent waste diversion (Tier 1 CALGreen).	**Compliant** The Project will be required to achieve a 65 percent waste diversion rate during construction activities.
Transportation Alternative and Congestion Management	
TACM-9. Efficient and Alternative Vehicles **Second Action Item:** Require new commercial construction over a certain size to be determined by City staff to provide an electric vehicle charging station and new residential construction to pre-wire for plug-in electric vehicles.	**Compliant** The Project will be required to pre-wire for plug-in electric vehicles.

In addition to compliance with the mandatory GHG reduction measures included in the Elk Grove CAP that apply to residential development, the proposed Project also includes a multi-use pedestrian trail within an 8.4-acre drainage parkway and the Project site itself is located adjacent to the Derr-Okamoto Community Park, which provides recreational options for future residents that can be accessed without the use of an automobile. **Table 6** provides a summary of Project GHG emissions after implementation of all of the required CAP measures shown in **Table 5** above. As shown in **Table 6**, compliance with the mandatory residential GHG reduction measures in the CAP would reduce emissions by 130 metric tons annually.

TABLE 6
OPERATIONAL GHG EMISSIONS (AFTER COMPLIANCE WITH CAP) – METRIC TONS PER YEAR

Source	CO_2	CH_4	N_2O	CO_2e
Construction (amortized over 30 years of Project life)	127.5	0.03	0.00	128
Area	7	0.00	0.00	7
Energy	1,356	0.05	0.02	1,363
Mobile	3,728	0.15	0.00	3,731
Solid Waste	76	4.5	0.00	171
Water	49	0.03	0.02	55
Total	**5,343.5**	**5**	**0.04**	**5,455**

Source: CalEEMod version 2013.2. Trip Generation rates per the Transportation Impact Study (Fehr & Peers 2013) prepared for the Project. Emissions estimates account for Tier 1 Title 24 Standards, indoor water conservation measures, the multi-use pedestrian trail and proximity to adjacent parkland. Refer to Appendix F for model data outputs.

As shown in **Table 6**, the proposed Project would comply with the GHG reduction measures included in the Elk Grove CAP that apply to residential development. As a result, the Project would comply with the AB 32 strategies to help California reach the emissions reduction targets. This impact is therefore less than significant. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
7. GEOLOGY AND SOILS. Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒	No
ii) Strong seismic ground shaking?	☐	☐	☒	☐	No
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	No
iv) Landslides?	☐	☐	☐	☒	No
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	No
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the projects, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐	No
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐	No
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	No

EXISTING SETTING

The majority of Sacramento County, including the entire City and the proposed Project site, lies in the Great Valley geomorphic province. A "geomorphic province" is defined as an area with similar geologic origin and erosional/depositional history. The Great Valley geomorphic province is an alluvial plain approximately 50 miles wide and 400 miles long located in central California (CGS 2002a). The Great Valley province is bounded on the north by the Klamath and Cascade mountain ranges, on the east by the Sierra Nevada, and on the west by the California Coast Mountain Range. The Great Valley is a trough in which sediments consisting of Cenozoic non-marine (continental) sedimentary rocks and alluvial deposits have been deposited almost continuously since the Jurassic period approximately 160 million years ago. The City is in the northern portion of the Great Valley geomorphic province, the Sacramento Valley, and is drained by the Sacramento River (CGS 2002a, 2002b).

Surface elevations in the Great Valley generally range from several feet below mean sea level (msl) to more than 1,000 feet above msl. The ground surface elevation in the vicinity of the City ranges from approximately 10 to 150 feet above msl (Elk Grove 2003b, p. 4.9-1).

Soils underlying the Project site and in the surrounding area are primarily composed of San Joaquin silt loam and San Joaquin-Galt Complex (USDA-NRCS 2013). The San Joaquin soil type is moderately well drained and moderately deep over a cemented hardpan. This base geologic condition does not lend to structural failures such as sinkholes. Since these soils are located at shallow depths, they are conducive to urban development. Properly designed foundations, buildings, and roads can help to prevent potential damage caused by the high shrink-swell potential and low subsoil strength (Elk Grove 2003b, p. 4.9-1).

The Project site is relatively flat and there are no distinctive geological features, such as rock outcroppings, located within or near the Project site. The EEGSP EIR did not identify and geological hazards that would affect the Project site for residential development.

Faults and Seismicity

Sacramento County and Elk Grove are less susceptible to adverse effects from seismic events and geologic hazards than other portions of California. Nevertheless, some property damage has occurred in the region as a result of seismic events in the past. The damage experienced has largely been the result of major seismic events occurring in adjacent areas, especially the San Francisco Bay Area and, to a lesser extent, the foothills of the Sierra Nevada range. Therefore, Sacramento County, like most of California, is considered a seismically active region.

There are no known active faults in the City, and no active or potentially active faults underlie the City. The City is not located in an Alquist-Priolo Earthquake Fault Zone. The closest fault to the City is the Foothills Fault System, which is 21 miles away (Elk Grove 2003b, p. 4.9-3).

Liquefaction and Ground Failure

The potential for liquefaction, which is the loss of soil strength due to seismic forces, is dependent on soil types and density, the groundwater table, and the duration and intensity of ground shaking. Based on these factors, the potential for liquefaction beneath the City, and thus the Project site, is considered low. The potential for ground lurching, differential settlement, or lateral spreading occurring during or after seismic events is also considered to be low (Elk Grove 2003b, p. 4.9-4).

Expansive Soils

Soils that contain a relatively high percentage of clay minerals have the potential to shrink and swell with changing moisture conditions. The San Joaquin soil group contains approximately 5 inches of claypan in the subsoil and contains a surface layer of brown silt loam between 11 and 23 inches thick. Therefore, as mentioned above, the shrink-swell potential is high in this soil type due to the high percentage of claypan (Elk Grove 2003b, p. 4.9-4).

Other Potential Geologic Hazards

There is a risk for subsidence, the gradual settling or sinking of the earth's surface with little or no horizontal motion, in Elk Grove and therefore within the Project area. Five causes of subsidence affect the City: compaction by heavy structures, erosion of peat soils, peat oxidation, fluid withdrawal, and compaction of unconsolidated soils by earthquake shaking. The pumping of water from subsurface water tables for residential, commercial, and agricultural uses causes the greatest amount of subsidence in the City (Elk Grove 2003b, p. 4.9-4).

There is little potential in the City and within the Project site for landslides to occur since there are no major slopes in the area. There are also no oceans, large bodies of water, or volcanoes in the City or immediate vicinity, so there is little or no possibility for seiches, tsunamis, or volcanic eruptions to occur (Elk Grove 2003b, p. 4.9-4).

PROJECT IMPACTS AND MITIGATION MEASURES

a) i) No Impact. There are no known faults crossing through the Project site or in the vicinity of the Project site. The closest fault is over 20 miles away from the City. Furthermore, the Project site is not located within an Alquist-Priolo Earthquake Fault Zone. Therefore, there would be no impact associated with surface rupture, and **there is no new or substantially more severe significant impact.**

ii) Less Than Significant Impact. As discussed under item i) above, the proposed Project site is not located in the vicinity of any active faults. In addition, the City is not located within an Alquist-Priolo Earthquake Fault Zone, and surface evidence of faulting has not been observed. However, due to the proximity to the San Andreas Fault Zone and other active faults such as those discussed above, the City may experience non-catastrophic ground shaking during a seismic event. The City has adopted the California Building Code (CBC), and all buildings constructed in the City, including those that would be developed under the proposed Project, would be required to comply with the CBC, which includes special design requirements for building and foundation stress capabilities, masonry and concrete reinforcement, and building spacing to accommodate moderate earthquake shaking. It has been shown that compliance with modern building codes can greatly reduce risks associated with ground shaking. The CBC design requirements reduce impacts associated with seismic ground shaking by preparing structures to accommodate moderate earthquake-related ground movement. Compliance with these seismic design parameters would ensure that impacts resulting from seismic ground shaking at the Project site would be less than significant. **There is no new or substantially more severe significant impact.**

iii) Less Than Significant Impact. As previously discussed, the potential for liquefaction is dependent on soil types and density, the groundwater table, and the duration and intensity of ground shaking. Based on these factors, the potential for liquefaction

beneath the City, and thus the Project site, is considered low and impacts would be less than significant. **There is no new or substantially more severe significant impact.**

iv) **No Impact.** The Project site is topographically flat; therefore, the likelihood of landslides is minimal. Furthermore, the City of Elk Grove General Plan Draft EIR (2003b) confirms that there is little potential for landslides to occur anywhere in the City, as there are no major slopes in the area and the maximum land surface slope within the City is 3 percent. Therefore, no impact associated with landslides is expected to occur. **There is no new or substantially more severe significant impact**

b) **Less Than Significant Impact.** The proposed Project would result in the development of 391 residential units on 107.1 acres. Construction associated with these activities would require grading and compaction of Project site soils, which would result in minor changes to the topography of the sites and surface relief features. This is particularly true on the Project site, as it is currently vacant. Over-covering of the soils on the Project site would occur to the extent necessary to construct the necessary facilities. Temporary increases in soil erosion from wind and water may be experienced during construction activities. The City's Land Grading and Erosion Control Codes (Title 16, Chapter 16.44 of the Municipal Code) establish procedures to minimize erosion and sedimentation during construction activities. Compliance with this chapter would reduce impacts associated with soil erosion during construction. After construction, the building foundations, parking areas, and other facilities constructed at the Project sites would serve to stabilize the soils that they cover and would effectively reduce erosion of all types. Therefore, this impact is considered to be less than significant, and **there is no new or substantially more severe significant impact.**

c–d) **Less Than Significant Impact.** The proposed Project provides for the future development of 391 residential units, which could place development on expansive and unstable soils, most notably, soils that may be subject to adverse impacts from subsidence. However, as required by the City of Elk Grove General Plan (2003a), all future development constructed on the Project site will be required to submit a geotechnical report that would include recommendations, design criteria, and specifications to reduce impacts related to expansive and unstable soils. In addition, all development proposed on the site would be required to comply with all applicable building codes, including the CBC and commonly accepted engineering practices, which require special design and construction methods for dealing with expansive and unstable soil behavior.

Compliance with recommendations included in the geotechnical reports and applicable building codes would ensure the on-site soils would be capable of supporting the structures resulting from approval of the proposed Project and would therefore reduce impacts resulting from expansive and unstable soils to a less than significant level. **There is no new or substantially more severe significant impact.**

e) **No Impact.** The Project will connect to the Sacramento Regional County Sanitation District (SRCSD) and Sacramento Area Sewer District (SASD) sewer system. The SRCSD is responsible for the regional interceptor collection system (sanitary wastewater facilities that are designed to carry flows in excess of 10 million gallons per day [mgd]) and treatment of wastewater. The SASD is responsible for the local collection system, including trunks (wastewater facilities that carry flows of 1 to 10 mgd) and laterals (wastewater facilities that carry flows of less than 1 mgd). The SASD provides local wastewater collection and transport from its facilities to the regional wastewater transmission, treatment, and disposal facilities operated by the SRCSD. The Project does

not propose the use or construction of septic tanks or alternative wastewater disposal systems; therefore, no impact would occur. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
8. HAZARDS AND HAZARDOUS MATERIALS. Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	No
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐	No
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	No
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	☐	☐	☐	☒	No
e) 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, result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	No
f) For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	No
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	No
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where	☐	☐	☒	☐	No

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?					

EXISTING SETTING

The Project site is currently undeveloped and does not have any known hazards or hazardous conditions. Residential development to the north, west, and southwest would likely use and store household hazardous materials in small quantities for personal use. Similarly, proposed homes within the Project site would likely use small amounts of household chemicals. However, it is unlikely that the use of household chemicals on- or off-site would result in hazardous conditions.

According to a query of the California Department of Toxic Substances Control's (2013a) Envirostor database, which contains the sites listed on the Hazardous Waste and Substances Site List (Cortese List) compiled pursuant to Government Code Section 65962.5(a), there are several former cleanup sites where leaking underground storage tanks (USTs) were present west of Waterman Road, approximately 0.5 mile west of the Project site, as well as several sites along Elk Grove Boulevard, west of Waterman Road, approximately 1 mile to the northwest. Other leaking UST sites are located in the industrial area at Grant Line Road and SR 99, approximately 1.25 miles to the southwest. However, all of the leaking UST sites mapped in the Envirostor database located east of SR 99 are closed cases and have been cleaned up in compliance with all applicable hazardous materials regulations.

The database also showed two school investigation locations approximately 0.5 mile northeast of the Project site. School investigations do not necessarily indicate the presence of hazards, but rather just investigate the site to determine if the site is safe for the future development of a school. Both investigations, one for the Elk Grove Montessori School and the other for an expansion of that school, are determined to require no further action and so are not considered to pose a hazard to development of the sites or the surrounding areas, including the Project site. No school has been constructed.

Other mapped hazard sites include a voluntary cleanup site located at the Georgia-Pacific Chemicals facility on East Stockton Road near SR 99, approximately 1.5 miles to the southwest; a school cleanup site at Katherine Albiani Middle School located at the intersection of Bond Road and Bradshaw Road, approximately 1.5 miles north of the Project site; and an inactive military investigation site also near the intersection of Bond Road and Bradshaw Road.

Of these listed sites, the school cleanup site at Katherine Albiani Middle School was cleaned up to remove chemicals from past agricultural uses, and the site was certified in 2003. Since then, the school was constructed, so this site is not considered to pose a threat to surrounding areas. The military investigation site is designated as an inactive site, but needs evaluation. The military investigation site listed is currently developed with more than 400 homes. With the distance to the Project site and the fact that this site is already developed with residential uses, it is assumed that this site does not pose a threat to the proposed Project.

The Georgia-Pacific Chemicals site is listed as being an active cleanup site. At this site, a former resin manufacturing facility that operated between 1967 and 2010, a voluntary cleanup effort was initiated in 2011 to clean up soil and surface water contamination that occurred due to past uses and the presence of aboveground storage tanks. Potential contaminants of concern at the site include lead, TPH-diesel, azobenzene, phenol, and xylenes (DTSC 2013a). As of July 2013, the status of the investigation is open, but cleanup activities have been completed and the Department of Toxic Substances Control (DTSC) is awaiting final documentation of site cleanup (DTSC 2013b). This investigation site does not pose a threat to the proposed Project.

The closest school to the Project site is Edna Bately Elementary School, approximately 1 mile to the north. As stated above, a possible Montessori school site is approximately 0.5 mile north. The EEGSP land use map planned for the future development of a school less than 0.25 mile west of the Project site, in the area that is currently undeveloped.

The Project site is located just west of the former Sunset Skyranch Airport. This private airport was denied a renewal for its use permit in 2006, so the facility is no longer in operation, and there are no plans for the use permit to be renewed. Therefore, it is assumed that this facility will remain out of operation.

PROJECT IMPACTS AND MITIGATION MEASURES

a–c) **Less Than Significant Impact.** The proposed Project would develop housing in an area that is currently undeveloped. Housing is located to the north and southwest of the Project site, and agricultural lands are located on the eastern side of Grant Line Road. Occupants of the housing that would be developed as part of the proposed Project would not be likely to use, store, or transport large quantities of hazardous materials. It is likely that occupants would use materials like cleansers, solvents, paints, etc. Similar materials would be used during construction of housing. Because the amount of these types of materials would be small, and because it is assumed they would be used in compliance with all applicable regulations for the storage, use, and transportation of such materials, it is assumed that this would not create hazardous conditions at or near the Project site. Without the presence of hazardous conditions, the risk of upset is highly unlikely, including for planned school sites that are within one-quarter mile of the Project site. Therefore, this impact is considered to be less than significant. **There is no new or substantially more severe significant impact.**

d) **No Impact.** The Project site is not located on a list of hazardous materials sites compiled by DTSC (2013) pursuant to Government Code Section 65962.5 as of July 2013, and there are no such sites in the nearby vicinity, so there would be no significant hazards to the public. Therefore, there is no impact. **There is no new or substantially more severe significant impact.**

e–f) **No Impact.** The Project site is not located within an airport land use plan or within 2 miles of an active public airport or a private airstrip, so there would be no such safety hazard to people working in the project area. A former private airport, the Sunset Skyranch Airport, is located just east of Grant Line Road, but that facility does not have an active use permit, and therefore airport operations are prohibited. There is no indication that the use permit for the airport will be renewed, so it is assumed that the airport will remain inactive. Therefore, there is no impact. **There is no new or substantially more severe significant impact.**

g) **No Impact.** The proposed Project does not include any components that would impair implementation or physically *interfere* with either the Sacramento County Multi-Hazard Plan or the Sacramento County Area Plan, both of which address plans for incidents involving hazardous materials or conditions, including evacuation plans. Therefore, there is no impact. **There is no new or substantially more severe significant impact.**

h) **Less Than Significant Impact.** The Project site is located in an area that is adjacent to agricultural lands on the eastern side of Grant Line Road, as well as lands that are currently fallow but are planned for future development to the west and south of the Project site. While fire on agricultural lands is a possibility, the site is not remote and is within the service area of the Cosumnes Community Services District (CCSD) Fire Department, which is able to respond to incidents in the Project area, including grassfires that may occur on the agricultural lands near the Project site. Therefore, this impact is considered to be less than significant. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
9. HYDROLOGY AND WATER QUALITY. Would the project:					
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	No
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	☐	☐	☒	☐	No
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐	No
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐	No
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	No
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐	No
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒	No

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒	No
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of a failure of a levee or dam?	☐	☐	☐	☒	No
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	No

EXISTING SETTING

REGIONAL SURFACE WATER HYDROLOGY

The proposed Project site is located in the southern portion of the Sacramento River Hydrologic Region, which covers approximately 17.4 million acres (27,200 square miles) (DWR 2006). The region includes all or large portions of Modoc, Siskiyou, Lassen, Shasta, Tehama, Glenn, Plumas, Butte, Colusa, Sutter, Yuba, Sierra, Nevada, Placer, Sacramento, El Dorado, Yolo, Solano, Lake, and Napa counties. Geographically, the region extends south from the Modoc Plateau and Cascade Range at the Oregon border to the Sacramento-San Joaquin Delta. The Sacramento Valley, which forms the core of the region, is bounded to the east by the crest of the Sierra Nevada and southern Cascades and to the west by the crest of the Coast Range and Klamath Mountains. Another significant feature is the Sacramento River, which is the longest river system in California with major tributaries the Pit, Feather, Yuba, Bear, and American rivers. The City is also located in the Morrison Creek Stream group drainage basin, a 192-square-mile watershed tributary to the Sacramento River Basin. The Morrison Creek Stream Group drainage basin consists of Elder, Elk Grove, Laguna (and tributaries), Morrison, Strawberry, and Whitehouse creeks. All creeks in the vicinity of the City drain into the Morrison Creek Stream Group, then eventually into the Sacramento River. Runoff from precipitation and snowmelt from the Sierra Nevada are the main sources of surface water for the City.

PROJECT SITE SURFACE HYDROLOGY

Topography on the site is relatively level with elevations ranging from 52 to 55 feet above mean sea level. Surface runoff generally enters Elk Grove Creek in the southern portion of the Project site or the riverine seasonal wetland that runs north–south through the center of the site. Limited wetland areas may also receive some surface runoff. The riverine seasonal wetland is tributary to Elk Grove Creek and converges with it in the southern portion of the Project site. The Project site and surrounding area are considered to be the headwaters of Elk Grove Creek. In total, the Project site contains 2.635 acres of potential waters of the United States, including 1.177 acres of Elk Grove Creek, 0.018 acres of depressional seasonal wetlands, 0.930 acres of riverine seasonal wetland, 0.057 acres of riverine seasonal marsh, and 0.453 acres of vernal pools.

The drainage area for this reach of Elk Grove Creek is identified as the Southern Drainage Shed in the EEGSP. A combination stormwater detention/water quality basin commonly known as the Hudson Basin was built with previous projects just south of Elk Grove Creek east of Waterman Road (west of the proposed Project site). The Hudson Basin receives direct pipe and overland flow from the Sonoma Creek subdivision and Newton Ranch Unit 1 projects on the south side of the creek. It also receives piped flow from the north side of the creek from Newton Ranch Unit 2 through a 48-inch concrete culvert. Two 30-inch pipes were used to cross under the creek.

The Hudson Basin was constructed in two phases with the Sonoma Creek and Newton Ranch projects to mitigate for Project impacts to water quality and increased runoff. According to the EEGSP, the basin was intended to divert peak flows from an improved and realigned Elk Grove Creek via a weir arrangement operating as an off-line basin. However, the channel improvements could not be constructed as originally planned due to US Army Corps of Engineers wetland permitting issues. Because of the permitting issues and timing of development, the basin does not function as originally intended. The basin currently functions as an in-line detention basin receiving both piped and overland flow from the development south of the creek, whereas only the piped flow from the development north of the creek enters the basin (Wood Rodgers 2013).

SURFACE WATER QUALITY

Elk Grove Creek is currently listed on the Clean Water Act Section 303(d) list for containing the pollutants chlorpyrifos and diazinon (SWRCB 2013).

GROUNDWATER

The *SCWA Zone 40: Groundwater Management Plan* (GMP) (2004) discusses groundwater in Zone 40, which includes both the City of Elk Grove and areas of Sacramento County surrounding the proposed Project site. Zone 40, as well as water supply facilities and water supplies other than groundwater, are discussed in more detail under subsection 17, Utilities and Service Systems. According to the GMP, formations that constitute the water-bearing deposits underlying Sacramento County include an upper, unconfined aquifer system consisting of the Victor, Fair Oaks, and Laguna formations (now known as the Modesto Formation) and a lower, semi-confined aquifer system consisting primarily of the Mehrten Formation known for its fine black sands. These formations are typically composed of lenses of inter-bedded sand, silt, and clay, interlaced with coarse-grained stream channel deposits (SCWA 2004). Groundwater in the Central Basin is generally classified as occurring in a shallow aquifer zone (Laguna or Modesto Formation) or in an underlying deeper aquifer zone (Mehrten Formation). In Zone 40, the shallow aquifer extends approximately 200 to 300 feet below the ground surface and, in general, the water quality in this zone is considered to be good except for the occurrence of arsenic in some locations. The shallow aquifer is typically targeted for private domestic wells requiring no treatment unless high arsenic values are encountered. The deep aquifer is separated from the shallow aquifer by a discontinuous clay layer that serves as a semi-confining layer for the deep aquifer. The base of the potable water portion of the deep aquifer averages approximately 1,400 feet below the ground surface. Water in the deep aquifer typically has higher concentrations of total dissolved solids (TDS), iron, and manganese. Groundwater used in Zone 40 is supplied from both the shallow and deeper aquifer systems (SCWA 2004).

Groundwater in central Sacramento County moves from sources of recharge to areas of discharge. Recharge to the local aquifer system occurs along active river and stream channels where extensive sand and gravel deposits exist, particularly along the American, Cosumnes, and Sacramento river channels. Additional recharge occurs along the eastern boundary of

Sacramento County at the transition point from the consolidated rocks of the Sierra Nevada to the alluvial deposited basin sediments. This typically occurs through fractured granitic rock that makes up the Sierra Nevada foothills. Other sources of recharge in the area include deep percolation from applied surface water, precipitation, and small streams. Changes in the groundwater surface elevation result from changes in groundwater recharge, discharge, or extraction. The majority of Elk Grove has poor groundwater recharge capabilities (Elk Grove 2003b). Additionally, the Sacramento County Ground Water Elevations Map dated fall of 2007 shows groundwater levels ranging from 40 feet below mean sea level to 20 feet below mean sea level in Elk Grove (SCDWR 2007). In the Project vicinity, groundwater depths are estimated to be approximately 85 feet below the ground surface. Groundwater depths are seasonally influenced by local pumping, rainfall, and irrigation patterns (EDAW 2009, p. 4.8-3).

The Sacramento County Water Agency (SCWA) meets water demands through a conjunctive use program of groundwater, surface water, and recycled water supplies, including a maximum yield 69,900 acre-feet per year (AFY) of groundwater from the groundwater basin underlying Zone 40 (SCWA 2004). The hydrologic effects of implementing the SCWA's Water Supply Master Plan (WSMP), which identifies a set of water supply alternatives that provide a long-term balance between water demands and supplies in Zone 40, were analyzed using the Sacramento County Integrated Groundwater Surface Water Model (IGSM). The IGSM model runs performed to analyze the effects of the Zone 40 WSMP to the groundwater basin under existing conditions, as well as 2030 conditions for different combinations of surface water and groundwater use (SCWA 2004). The modeling evaluated projected pumping within the groundwater basin by the SCWA as well as all other water users, including those for agriculture. The results of the groundwater model indicated that in 2030 approximately 74,000 acre-feet annually of groundwater is expected to be pumped by the SCWA and private urban and agricultural water users for use in the Zone 40 2030 Study Area. This volume, combined with other pumping in the Central Basin (including pumping for groundwater remediation) would be less than the sustainable-yield recommendation of 273,000 AFY for all modeled scenarios that assume some level of reuse of remediated groundwater. Stabilized groundwater elevations at the Central Basin's cone of depression under the modeled scenarios would range from approximately 50 feet below mean sea level (msl) to 84 feet below msl, which are all substantially higher than the projected level of 116 feet below msl to 130 feet below msl. Groundwater pumping associated with the Zone 40 WSMP would not cause sustainable yield recommendations to be exceeded. Therefore, groundwater levels at the Central Basin cone of depression are projected to be higher than those determined to be acceptable to the Water Forum.

FLOODING

The previously adopted EIR analyzed the potential for flooding at the Project site and found a portion of the Project site was in the 100-year floodplain, as defined by FEMA at the time. However, with improvements to drainage and levees, the most recent flood map covering the Project site identifies the site being outside of the 100-year floodplain (FEMA 2012). However, a known existing flooding issue exists downstream from the Project site along Elk Grove Creek west of Waterman Road. To prevent further issues in this location downstream, projects upstream must mitigate their flows.

STORMWATER

The City Public Works Department has jurisdiction over aspects of stormwater management in the City, and the Sacramento County Department of Water Resources has jurisdiction over areas outside the City in the unincorporated areas. The Water Resources division of the Elk Grove

Public Works Department is responsible for drainage, flood control, stormwater quality, and long-term water and urban runoff planning in the City.

Upon its incorporation in July 2000, the City adopted two County ordinances that provide legal authority for the Stormwater Quality Improvement Program— Chapters 15.12 and 16.44 of the Elk Grove Municipal Code, Stormwater Management and Discharge Control , Land Grading and Erosion Control, respectively. Chapter 15.12 prohibits most non-stormwater discharges conditionally allowable (e.g., water from firefighting activities) pursuant to National Pollutant Discharge Elimination System (NPDES) federal regulations. It also provides legal authority to the City for inspections and enforcement related to control of illegal and industrial discharges to the City storm drainage system and local receiving waters. Chapter 16.44 requires projects in Elk Grove disturbing 350 cubic yards or more of soil or 1 or more acres of land to prepare an erosion and sediment control plan specifying best management practices (BMPs) for erosion and sediment control, and provides legal authority to Elk Grove for inspections and enforcement needed to ensure compliance with the ordinance.

The City of Elk Grove is a joint participant with Sacramento County's NPDES. The permit was renewed in December 2002 and allows the City to discharge urban runoff from Municipal Separate Storm Sewer Systems (MS4s) in its municipal jurisdictions. The permit requires that the City impose water quality and watershed protection measures for all development projects. The NPDES also requires every new construction project to have a permit for every new construction project that implements the following measures:

- Eliminate or reduce non-stormwater discharges to stormwater systems and other waters of the nation.
- Develop and implement a stormwater pollution prevention plan (SWPPP).
- Perform inspections of stormwater control structures and pollution prevention measures.

PROJECT IMPACTS AND MITIGATION MEASURES

a, f) **Less Than Significant Impact.** The EEGSP EIR determined that individual projects within the EEGSP area may not have a significant impact on surface water quality, but that cumulatively impacts would be significant without implementation of mitigation. The EEGSP was developed with this in mind, so it contained provisions for water quality treatment facilities, including stormwater quality treatment basins, each of which would also provide for flood control. Sacramento County also required that development within the EEGSP area would need to implement erosion and sediment control measures to mitigate possible impacts on water quality. This would require that construction activities that would disturb 5 acres or more would need to file a Notice of Intent to obtain coverage under the State's General Construction Stormwater Permit prior to construction. To obtain this coverage, the Project applicant would need to develop a stormwater pollution prevention program (SWPPP) for the Project.

Like all development within the EEGSP, construction of the proposed Project could potentially result in adverse impacts on water quality during construction or occupancy of the Project. However, implementation of the requirements of the EEGSP and the mitigation required by the EEGSP EIR are still applicable and required for the proposed Project. The proposed modifications to the Project would not cause additional impacts over those that were evaluated in the EEGSP EIR. Development of the proposed Project would be subject to the requirements of the EEGSP and mitigation from the EEGSP, which

mitigate the impact. Therefore, this impact is less than significant, and **there is no new or substantially more severe significant impact.**

b) **Less Than Significant Impact.** The Project would receive water supply from the Elk Grove Water District (EGWD), which provides pumped groundwater and treated conjunctive use (surface water and groundwater supplies) water purchased from the Sacramento County Water Agency (SCWA). The EEGSP EIR identified ongoing issues regarding declining groundwater levels in southern Sacramento County and disclosed that cumulative development of the EEGSP would exacerbate the issue. For this reason, the EEGSP EIR reiterated Sacramento County General Plan policies that would aid in ensuring that development of the EEGSP area would not result in groundwater withdrawals in excess of a safe yield. The EEGSP EIR also included consultation with SCWA, which was working on studies and water conservation programs that would reduce demand for water supplies and therefore for groundwater, and ensure that only a safe yield is pumped to supply the EEGSP area.

With regard to groundwater recharge, development of the Project site would convert most of the site, with the exception of the open space area surrounding Elk Grove Creek, to impervious surfaces, which could adversely affect groundwater recharge potential. However, as noted above, the majority of Elk Grove has poor groundwater recharge capabilities; recharge to the local aquifer system occurs along active river and stream channels where extensive sand and gravel deposits exist, particularly along the American, Cosumnes, and Sacramento river channels. While the proposed Project would result in more units than assumed in the EEGSP EIR, because the Project site has poor groundwater recharge capabilities, the recharge potential on the site would not be substantially changed from that analyzed in the EEGSP EIR.

As described in more detail in subsection 17, Utilities and Service Systems, based on an average demand of 202 gallons per capita per day (gpcd,) consistent with the EGWD's 2010 Urban Water Management Plan (UWMP), development of the proposed Project would result in a total water demand of 271.5 acre-feet per year (AFY). If the site were developed as approved in the EEGSP EIR, the estimated water demand for development within the Project site would be 123 AFY (110,292 gallons per day); however, it should be noted that this is based on current water demand rates, which have decreased since the EEGSP EIR was approved due to improved water efficiency measures and building materials. In Zone 41, SCWA expects that by 2035, total water supply would be 120,698 AFY and demand would be 87,567 AFY, leaving a surplus of 31,788 AFY (29 percent). Supply and demand are expected to remain the same in single dry-year and multiple dry-year scenarios (SCWA 2011, pp. 7-2–7-5). During dry periods, the SCWA would reduce its surface water supplies and supplement with groundwater supplies to keep the total water supply constant. The SCWA does not anticipate groundwater supply shortages (SCWA 2011, p. 7-5).

The increase in water demand generated by the proposed Project would be minor compared to the sustainable yield of the SCWA's groundwater supplies, so the project would not result in substantial depletion of groundwater. Therefore, this impact is less than significant, and **there is no new or substantially more severe significant impact.**

c–e) **Less Than Significant Impact.** The proposed modifications to the Project would result in a change from the drainage conditions previously analyzed in the EEGSP EIR. Along with the overall increase of density proposed within the Project site, the Project applicant is proposing to alter the course of the riverine seasonal wetland that moves water from the

northeast portion of the site to Elk Grove Creek in the southern end of the site. The channel would be moved from its natural course and rechannelized within a linear open space area that would move flows from the park in the northeast corner of the site to Elk Grove Creek. Two detention basins are proposed at the southern end of the open space drainage area, before flows enter Elk Grove Creek.

As mentioned above in the discussion of the existing setting, although stormwater drainage impacts were addressed in the EEGSP, areas west of Waterman Road experience localized flooding due to lack of detention upstream in Elk Grove Creek. Since the Project site and surrounding areas are considered to be the headwaters of Elk Grove Creek, the proposed Project has been designed to fully detain flows from the site and from surrounding sites that drain through the Project site. The Drainage Master Plan (Wood Rodgers 2013) provided an evaluation of whether the modified Project design would worsen drainage and flooding impacts downstream. The plan concluded that, as proposed, the Project would not contribute to worsening localized flooding conditions downstream (Wood Rodgers 2013, p. 13) and that the Project adequately controls its own stormwater flows. Based on these findings, this impact is considered to be less than significant. **There is no new or substantially more severe significant impact.**

g–h) **No Impact.** The Project would not place housing or any structures within a 100-year flood hazard area (Wood Rodgers 2013). Therefore, there is no impact. **There is no new or substantially more severe significant impact.**

i) **No Impact.** The dam nearest to the Project site is the Folsom Dam. The Project site is located outside of the Folsom Dam Failure Flood Area. Therefore, implementation of the Project would not expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of a failure of a levee or dam. Therefore, there would be no impact. **There is no new or substantially more severe significant impact.**

j) **No Impact.** The Project site is not located near any large body of water or any seiche hazard areas. Therefore, the Project would not expose people to potential impacts involving seiche or tsunami. No potential for mudflows is anticipated. Therefore, there would be no impact. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
10. LAND USE AND PLANNING. Would the project:					
a) Physically divide an existing community?	☐	☐	☐	☒	No
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒	No
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	No

EXISTING SETTING

EXISTING LAND USES

The Project site is located within the East Elk Grove Specific Plan (EEGSP) area, which consists of residential, commercial, industrial, park, open space, school, and right-of-way land uses. The areas surrounding the Project site contain developed residential uses and undeveloped land zoned for future residential uses within the EEGSP. Agricultural and rural residential uses are located to the east in unincorporated Sacramento County, along with a former private airport.

The General Plan Land Use Element designates land uses within the City. The City of Elk Grove General Plan Land Use Policy Map designates the Project area Rural Residential (0.1–0.5 residential dwelling units per acre [du/ac]), Estate Residential (0.51–4.0 du/ac), Low Density Residential (4.1–7.0 du/ac), and Public Open Space/Recreation. The Project site is zoned AR-10 (agricultural residential, minimum 10-acre lot size), and the EEGSP designates the Project site as Residential 5-acre Lots, Residential 2–4 du/ac, Residential 4 du/ac, Parks and Open Space.

PROJECT IMPACTS AND MITIGATION MEASURES

a) **No impact.** The Project site is located within the EEGSP area, which consists of residential, commercial, industrial, parks, open space, school, and right-of-way land uses. The Project site is designated for residential, park, and open space uses. The proposed Project would not divide an established community. Therefore, there is no impact. **There is no new or substantially more severe significant impact.**

b) **No impact.** The proposed Project proposes to modify the Project site's zoning, General Plan designation, and Specific Plan designation. While this represents a change, the

existing zoning and plan designations are in place to avoid potential conflicts with operations at the Sunset Skyridge Airport, which is no longer in use. Now that airport operations are no longer a constraint to the development of the Project site, the existing zoning and land use designations at the Project site no longer avoid or mitigate an environmental effect. Therefore, the Project would not conflict with such intent. In addition, the EEGSP and General Plan both provide flexibility in the event the designation of a site needs to change; while zoning and plan designations assist a jurisdiction in guiding land use development, they are not intended to be permanent changes that are unable to change. Nothing in either the General Plan or the EEGSP precludes the City from modifying the zoning or plan designations at the site as long as the proposed zoning and plan designations do not conflict with the existing surrounding development. The proposed Project does not. Therefore, there would be no impact. **There is no new or substantially more severe significant impact.**

c) **No Impact.** The City does not have an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. The South Sacramento County Habitat Conservation Plan is in the process of being prepared, but has not yet been adopted. Therefore, there would be no impact. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
11. MINERAL RESOURCES. Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	No
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒	No

EXISTING SETTING

Mineral resources in Sacramento County include sand, gravel, clay, gold, silver, peat, topsoil, lignite, natural gas, and petroleum. Potential sources of quality aggregate exist within Sacramento County. These potential sources are in areas classified by the Surface Mining and Reclamation Act of 1975 (SMARA) Special Report 156 as MRZ-3, a classification that includes areas "containing aggregate deposits, the significance of which cannot be evaluated from available data" and include igneous rocks of volcanic origin and metamorphic rocks (Sacramento County 2007; Elk Grove 2003b). Using data contained in SMARA Special Report 156, the City of Elk Grove was classified for its mineral resource potential and is covered by the MRZ-3 classification. However, no known significant mineral resources have been identified in the City of Elk Grove.

PROJECT IMPACTS AND MITIGATION MEASURES

a–b) No Impact. As no known significant mineral resources have been identified in the City, implementation of the proposed Project is not expected to result in the loss of availability of a known mineral resource or a resource delineated on a local general plan, specific plan, or other land use plan. No impact would occur. **There is no new or substantially more severe significant impact**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
12. NOISE. Would the project result in:					
a) 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?	☐	☒	☐	☐	No
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	No
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐	No
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	No
e) 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, expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	No
f) For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	No

Information in this section is based primarily on a noise study prepared for the proposed Project by J. C. Brennan & Associates in September 2013 (**Appendix G**), which also includes a description of acoustic fundamentals and pertinent regulatory information.

EXISTING SETTING

The existing noise environment in the Project area is defined primarily by the local roadway network, including Grant Line Road and Bradshaw Road, which are adjacent to the southeast and east sides of the Project site, respectively.

EXISTING AMBIENT NOISE LEVELS

Based on noise level measurements conducted for the City of Elk Grove General Plan and General Plan EIR, the noise study determined that the typical noise levels in areas away from major noise sources range between 50 dBA L_{dn} and 55 dBA L_{dn}. Typical noise levels adjacent to major roadways such as Bradshaw Road and Grant Line Road range between 60 dBA L_{dn} and 65 dBA L_{dn}, as shown in the General Plan EIR (Elk Grove 2003b).

EXISTING TRAFFIC NOISE LEVELS

The noise study used the Federal Highway Administration *Highway Traffic Noise Prediction Model* (FHWA RD-77-108) to describe existing noise levels due to traffic. Traffic volumes for existing conditions were obtained from the Project traffic consultant (Fehr & Peers). Truck usage on area roadways was estimated from field observations and file data.

Table 7 shows the predicted existing traffic noise levels in terms of the Day/Night Average Level descriptor (L_{dn}) at a standard distance of 100 feet from the centerlines of the existing Project area roadways for existing conditions, as well as distances to existing traffic noise contours. The extent to which existing land uses in the Project vicinity are affected by existing traffic noise depends on their respective proximity to the roadways and their individual sensitivity to noise.

TABLE 7
EXISTING TRAFFIC NOISE LEVELS AND DISTANCE TO CONTOURS

Roadway	Segment	L_{dn} (dB) @ 100 Feet	Distance to Contours (feet)		
			70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
Bradshaw Road	Elk Grove Boulevard to Grant Line Road	59	19	41	88
Bradshaw Road	Elk Grove Boulevard to Bond Road	61	24	52	112
Grant Line Road	Elk Grove Boulevard to Bradshaw Road	65	47	101	218
Grant Line Road	Bradshaw Road to Waterman Road	65	47	101	218
Elk Grove Blvd	Grant Line Road to Bradshaw Road	62	28	61	131
Elk Grove Blvd	Bradshaw Road to Waterman Road	62	28	61	131
Waterman Road	Grant Line Road to Mainline Drive	59	18	40	89
Waterman Road	Mainline Drive to Elk Grove Boulevard	61	25	54	117
Mainline Drive	Waterman Road to Wyland Drive	45	2	5	11
Mainline Drive	Wyland Drive to Elk Grove Boulevard	48	3	7	15

Source: J. C. Brennan & Associates 2013 ; Fehr & Peers 2013

Notes: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.

METHODOLOGY

TRAFFIC NOISE

Traffic noise levels in the noise study were predicted at the sensitive receptors located at the closest typical setback distance along each Project area roadway segment. A conservative adjustment of -5 dB is assumed where noise barriers are located adjacent to sensitive receptors.

In some locations, sensitive receptors may not receive full shielding from noise barriers or may be located at distances which vary from the assumed calculation distance. However, the traffic noise analysis is believed to be representative of the majority of sensitive receptors located closest to the Project area roadway segments analyzed in the traffic study.

CONSTRUCTION NOISE

Construction noise impacts primarily result when: (1) construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours); (2) the construction occurs in areas immediately adjoining noise-sensitive land uses; or (3) construction lasts over extended periods of time.

Activities involved in construction would generate maximum noise levels, as indicated in **Table 8**, ranging from 76 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A primary Project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration and would occur primarily during daytime hours.

TABLE 8
CONSTRUCTION EQUIPMENT NOISE LEVELS

Type of Equipment	Predicted Noise Levels, L_{max} dB				Distances to Noise Contours (feet)	
	Noise Level at 50 Feet	Noise Level at 100 Feet	Noise Level at 200 Feet	Noise Level at 400 Feet	70 dB L_{max} contour	65 dB L_{max} contour
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Concrete Saw	90	84	78	72	500	889
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315
Jackhammer	89	83	77	71	446	792
Pneumatic Tools	85	79	73	67	281	500

Source: J. C. Brennan & Associates 2013

CONSTRUCTION VIBRATION

The types of construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the

threshold of perception. Building damage can take the form of cosmetic or structural. **Table 9** shows the typical vibration levels produced by construction equipment.

TABLE 9
VIBRATION LEVELS FOR VARYING CONSTRUCTION EQUIPMENT

Type of Equipment	Peak Particle Velocity @ 25 Feet (inches/second)	Approximate Velocity Level @ 25 Feet (VdB)
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Small Bulldozer	0.003	58
Auger/drill Rigs	0.089	87
Jackhammer	0.035	79
Vibratory Hammer	0.070	85
Vibratory Compactor/roller	0.210	94

Source: *J. C. Brennan & Associates 2013*

PROJECT IMPACTS AND MITIGATION MEASURES

a, c) **Less Than Significant With Mitigation Incorporated.** The proposed Project could result in increases in traffic noise levels on the local street system or expose residences to traffic noise levels that could exceed the City of Elk Grove noise level criteria for both interior and exterior spaces. The noise study included analysis of both the Project and Cumulative plus Project conditions. **Table 10** shows the results of the noise modeling. As shown in the **Table 10**, the Project would result in increases in traffic noise levels between 0 dBA and 8 dBA under the Existing + Project Conditions. The Project could contribute to a significant increase in traffic noise levels only along Mainline Drive between Waterman Road and Wyland Drive under Existing + Project Conditions, where traffic noise levels would increase from approximately 45 dB L_{dn} to 53 dB L_{dn}. However, the roadway traffic volumes would not exceed the City of Elk Grove exterior noise level standard of 60 dB L_{dn} at residences along Mainline Drive. Based on field observations, these are fairly recently constructed homes that have sound walls along Waterman Road. Background noise levels from Waterman Road, at residences adjacent to Mainline Road, are expected to be higher than 53 dB L_{dn}, but noise levels from the proposed Project would not significantly increase overall noise levels.

Enforcement/Monitoring: City of Elk Grove Planning Department

TABLE 10
PREDICTED TRAFFIC NOISE LEVEL AND PROJECT-RELATED TRAFFIC NOISE LEVEL INCREASES

Roadway	Segment	Predicted L_{dn} @ Closest Sensitive Receptors (dB)								
		Existing No Project (per Fehr & Peers)	Existing + Project (per Fehr & Peers)	Change	Cumulative No Project (per Fehr & Peers)	Cumulative + Project (per Fehr & Peers)	General Plan Future + GP	Change	Distance to Cumulative + Project Traffic Noise Contours (feet)	
									65 dB	60 dB
Bradshaw Road	Elk Grove Boulevard to Grant Line Road	59	59	0	62	62	67.9	-5.9	66	142
Bradshaw Road	Elk Grove Boulevard to Bond Road	61	61	0	63	63	67.9	-4.9	74	159
Grant Line Road	Elk Grove Boulevard to Bradshaw Road	65	65	0	68	68	70.6	-2.6	160	345
Grant Line Road	Bradshaw Road to Waterman Road	65	65	0	68	68	70.6	-2.6	160	345
Elk Grove Blvd	Grant Line Road to Bradshaw Road	62	62	0	64	64	64.4	-0.4	93	199
Elk Grove Blvd	Bradshaw Road to Waterman Road	62	62	0	64	64	64.4	-0.4	93	199
Waterman Road	Grant Line Road to Mainline Drive	59	59	0	64	67	66.2	+0.8	130	280
Waterman Road	Mainline Drive to Elk Grove Boulevard	61	62	+1	64	64	66.2	-2.2	87	188
Mainline Drive	Waterman Road to Wyland Drive	45	53	+8	52	54	NA	+2*	18	38
Mainline Drive	Wyland Drive to Elk Grove Boulevard	48	52	+4	51	52	NA	+1*	14	31

** Mainline Drive was not evaluated in the General Plan. The change in noise level is based on the Fehr & Peers traffic analysis.*

Bold *indicates a significant increase in traffic noise levels based upon the FICON criteria shown in Table 5 of the noise study.*

Source: J. C. Brennan & Associates 2013 ; Fehr & Peers 2013; Elk Grove 2003b

Under Cumulative + Project Conditions, the Project would result in changes in traffic noise levels between -5.9 dBA and +0.8 dBA, as compared to the anticipated traffic noise levels in the General Plan. The Project would not contribute to a significant increase in cumulative traffic noise levels.

However, under Cumulative + Project conditions, the Project would be exposed to future traffic noise levels from Grant Line Road of approximately 68 dB L_{dn} and from Bradshaw Road of approximately 62 dB L_{dn}. Both cases exceed the City of Elk Grove exterior noise level standard of 60 dB L_{dn}. The City has an interior noise level criterion of 45 dB L_{dn}. It is expected that first-floor rooms would benefit from future sound walls and would comply with the interior noise level standard of 45 dB L_{dn}. However, second floors of residences are generally exposed to traffic noise levels of approximately 3 dB higher due to reflections and lack of excess ground absorption, and would not benefit from sound walls.

Typical construction practices would result in an exterior to interior noise level reduction of 25 dB with the windows and doors closed. Therefore, although traffic noise from Bradshaw Road may be as high as 65 dB L_{dn} at upper floors, interior noise levels are expected to comply with the interior noise level standard of 45 dB L_{dn}. However, traffic noise from Grant Line Road is expected to be as high as 71 dB L_{dn} at second-floor residences and may exceed the interior noise level standard of 45 dB L_{dn}.

Traffic noise levels from Grant Line Road and Bradshaw Road could exceed both interior and exterior noise standards, particularly on second floors. Barriers are the most practical form of mitigation. This impact is considered to be potentially significant, but implementation of mitigation measures **NOI-1** and **NOI-2** would reduce the level of significance to less than significant. **There is no new or substantially more severe significant impact.**

Mitigation Measures

NOI-1 To reduce impacts of traffic noise on future residents of the proposed Project, noise barriers shall be constructed along the Project frontage at Grant Line Road and Bradshaw Road. Depending on the final grading plans and tentative maps, barriers could range between 6 and 8 feet. Final barrier height and design shall be determined by a qualified acoustical professional when final grading plans and subdivision designs are available. The barrier designs shall comply with an exterior noise level standard of 60 dB L_{dn} at the outdoor activity areas.

Timing/Implementation: *When final grading plans and subdivision designs are available*

Enforcement/Monitoring: *City of Elk Grove Planning Department*

NOI-2 When floor plans and elevations have been completed, the Project applicant shall have detailed analysis of interior noise levels conducted by a qualified acoustical professional to ensure compliance with the 45 dB L_{dn} interior noise level standard.

Timing/Implementation: *After floor plans and elevations have been completed*

b) **Less Than Significant Impact.** The Project does not include any components that would result in vibration during occupation of the Project site. However, vibration could occur during construction activities. The primary construction activities associated with the Project would occur when infrastructure such as buildings and utilities are constructed. Some construction could occur during occupancy of existing and future residential units; however, it is expected that they would occur at considerable distances from existing occupied residences and would be removed from future on-site uses. Of the construction equipment anticipated to be used on the Project site during construction (see **Table 9**), only the vibratory compactor is expected to exceed 0.1 inches per second peak particle velocity (ppv), which is the threshold for annoyance, and is well below the 1.0 inches per second ppv that is the threshold for structural damage. These levels are based on a reference distance of 25 feet. The primary construction activities are anticipated to be a minimum of 100 feet from the nearest residences. Peak particle velocities are predicted to be less than 0.001 inches per second. Therefore, it is not expected that vibration impacts would occur which would cause any structural damage or potential for annoyance. This impact is considered to be less than significant. **There is no new or substantially more severe significant impact.**

d) **Less Than Significant Impact.** Construction of the proposed Project would temporarily increase noise levels during construction. This would be a potentially significant impact. Noise from construction activities would add to the noise environment in the immediate Project vicinity. Activities involved in typical construction would generate maximum noise levels ranging from 78 to 90 dB at a distance of 50 feet (see **Table 8**).

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant Project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration and would likely occur primarily during daytime hours.

Chapter 6.32 (Noise Control) of the Elk Grove Municipal Code exempts construction activities from the specified noise ordinance standards during the hours from 6:00 a.m. to 8:00 p.m. Monday through Friday and from 7:00 a.m. to 8:00 p.m. on Saturday through Sunday. If a construction project adheres to the construction times identified in the Noise Control Chapter, construction noise is exempted. The General Plan Noise Element has developed action items specific to construction activities under Policy NO-3 due to the loud nature of some construction activities. These include the following: Limit construction activity to the hours of 7 a.m. to 7 p.m. whenever such activity is adjacent to residential uses; and stationary construction equipment and construction staging areas must be set back from existing noise-sensitive land uses. This impact is considered to be less than significant, and **there would be no new or more severe significant effect**.

e–f) **No Impact.** The Project site is not within an airport land use plan or within 2 miles of a public airport. A closed private airport, the Sunset Skyranch Airport, is located on the opposite side of Grant Line Road from the Project site. However, the facility does not have a use permit that allows for airport operations, and a renewal was denied. Therefore, future residents of the Project site would not be exposed to excessive noise levels from either public or private airport operations. Therefore, there would be no impact. **There is no new or substantially more severe significant impact.**

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
13. POPULATION AND HOUSING. Would the project:					
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐	No
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	No
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	No

EXISTING SETTING

POPULATION AND POPULATION TRENDS

Elk Grove's population in the year 2000 was 72,665 persons, compared to Sacramento County's population of 1,223,499 (US Census Bureau 2000). Prior to the City's incorporation in 2000, the population of Elk Grove increased at an average rate of 7 percent annually, or a 70.5 percent increase since 1990 (Elk Grove 2003b). Sacramento County experienced a much slower rate of growth during that time period, with population increasing only 17.5 percent from 1,041,219 in 1990 to 1,223,499 in 2000 (US Census Bureau 2000, 1990). Growth in Sacramento County declined slightly to nearly 16 percent between 2000 and 2010.

Elk Grove experienced rapid population growth after its incorporation in 2000, continuing with an average growth rate of over 7 percent until 2010, with population increasing by 210 percent over the 2000 population. Growth declined when new housing development stalled throughout the Sacramento region due to economic conditions.

HOUSING

In May 2013, the California Department of Finance released housing unit estimates for 2011 through 2013. In Elk Grove, it was estimated that there were 51,973 housing units in 2013, up from 50,634 in 2010, an approximately 2.4 percent increase. However, it should be noted that the number of housing units increased by an average of 11.17 percent each year between 2001 and 2007 (Elk Grove 2008, p. 4.2-2). Since 2007, the housing market cooled significantly due to economic conditions, and new housing development in Elk Grove dropped far below the levels experienced between 2001 and 2007. The period between 2012 and 2013 saw the largest increase in new housing in years, with a 1.5 percent increase. As of 2013, there are signs of economic recovery, particularly in the housing market. Several new home builders have recently

begun new home development, and many new housing projects that became dormant after 2007 have started up again.

PROJECT IMPACTS AND MITIGATION MEASURES

a) **Less Than Significant Impact.** The proposed Project includes 391 residential units, an increase in the total number of residential units approved in the EEGSP by 213 single-family units. Using the City's average of 3.07 persons per household, developing residential units on the Project site would generate a population increase of 1,200, which is 654 more than assumed for the Project site in the EEGSP EIR. Therefore, the proposed Project would directly result in growth on the Project site. The Project site was approved for residential development in the EEGSP and the General Plan. The Project site is currently served by existing roads and other infrastructure to serve existing and planned development in the Project vicinity, so it would not result in indirect population growth through the extension of infrastructure or roadways.

The EEGSP anticipated future residential, commercial, and industrial land uses, with over 4,300 housing units in the EEGSP area. Guidelines and standards for the EEGSP were drafted to address all such future growth within the Specific Plan area. The EEGSP was included in the Elk Grove General Plan (2003a), and the environmental impacts of population growth in the EEGSP area were programmatically analyzed in the *Elk Grove General Plan Volume 1: Draft Environmental Impact Report* (2003b). As discussed in the other sections of this Initial Study, the physical effects of developing the proposed Project have been adequately addressed in the previous EIR and **would not result in a new or more severe significant environmental effect.**

b–c) **No Impact.** The Project site does not currently contain any residential units. The Project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. Therefore there is no impact. **There is no new or substantially more severe significant impact**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
14. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:					
a) Fire protection?	☐	☐	☒	☐	No
b) Police protection?	☐	☐	☒	☐	No
c) Schools?	☐	☐	☒	☐	No
d) Parks?	☐	☐	☒	☐	No
e) Other public facilities?	☐	☐	☒	☐	No

EXISTING SETTING

FIRE PROTECTION

Fire protection services in Elk Grove are provided by the Cosumnes Community Services District (CCSD). The CCSD provides emergency services such as fire suppression, emergency medical services, technical rescue, and arson and explosion investigations in a 157-square-mile service area covering Elk Grove, Galt, and a portion of unincorporated southern Sacramento County. The CCSD has more than 150 sworn personnel in its Operations Division and operates out of eight fire stations with eight engine companies, one ladder truck, six ambulances, and one command vehicle, as well as other specialized apparatus for specialized emergency circumstances (CCSD 2013a). The CCSD's fire stations are in the following locations:

- Fire Station 45, located at 229 5th Street in central Galt
- Fire Station 46, located at 1050 Walnut Avenue in northeast Galt
- Fire Station 71, located at 8760 Elk Grove Boulevard
- Fire Station 72, located at 10035 Atkins Drive in the East Franklin Specific Plan area
- Fire Station 73, located at 9607 Bond Road; this station provides fire and emergency medical services
- Fire Station 74, located at 6501 Laguna Park Drive
- Fire Station 75, located at 2300 Maritime Drive
- Fire Station 76, located at 8545 Sheldon Road

The nearest fire station to the Project site is Fire Station 73 approximately 1.8 street miles to the north.

POLICE PROTECTION

The City of Elk Grove Police Department (EGPD) was formed in conjunction with the City's incorporation in July 2000 and operates as a full-service law enforcement agency through Sacramento County's Sheriff's Department. The City created its in-house police department on October 28, 2006. The service boundaries of the EGPD are contiguous with the City limits. The EGPD provides all law enforcement services including responding to all crime-related events, handling all traffic-related issues, and providing community services to the citizens of Elk Grove (EDAW 2009, p. 4.5-5).

The EGPD operates primarily out of two facilities located in the City Hall complex at 8380 and 8400 Laguna Palms Way, approximately 3 miles northwest of the Project site. The EGPD provides the full range of public safety services for the City. Patrol personnel handle calls for service from residents, businesses, and visitors. The EGPD has a total staff of 208.5 including 130.5 sworn police officers and 78 non-sworn management, administrative, and technical positions. The EGPD responded to 100,966 emergency and nonemergency calls for service in 2012 (Davis 2013).

SCHOOLS

The City of Elk Grove is located within the service area of the Elk Grove Unified School District (EGUSD). The EGUSD covers 320 square miles and is the fifth largest school district in California and the largest in Northern California (EGUSD 2013). The EGUSD boundaries encompass the entire City of Elk Grove, portions of the cities of Sacramento and Rancho Cordova, and most of southern Sacramento County. Currently, the district provides education to over 62,000 students and operates 64 schools: 39 elementary schools, 9 middle schools, 9 high schools, 4 alternative education schools, 1 adult school, and 1 charter school (EGUSD 2013).

PARKS

The CCSD provides parks services to the Elk Grove community through its Parks and Recreation Department. The department plans and designs new parks; owns, operates, and maintains parks and community centers; manages rentals of community centers, picnic sites, and sports fields; and offers recreation programs. Currently, the CCSD manages 92 parks, 18 miles of off-street trails, 2 community centers, 4 recreation centers, and 2 aquatics complexes. The Parks and Recreation Department has a staff of 68 full-time employees (CCSD 2013b).

PROJECT IMPACTS AND MITIGATION MEASURES

a) **Less Than Significant Impact.** The EEGSP was developed with consultation from the Elk Grove Community Services District, which later merged with the Galt Fire Protection District to form the Cosumnes Community Services District in 2006, which now provides fire protection services to the Project site and the EEGSP area. At the time, the district provided input that was used to develop the EEGSP in a way that minimized the potential for impacts associated with the provision of fire protection services or to develop mitigation to reduce potential impacts and provide funding for new fire facilities to serve the EEGSP area. At the time the EEGSP EIR was prepared, there were only two fire stations in Elk Grove, and one was being developed. Since then, another two fire stations have been built.

The proposed Project would not trigger the need for additional fire protection facilities, considering that three fire stations have been constructed in Elk Grove since the EEGSP

EIR was adopted. Another fire station is also planned at Bruceville Road south of Kammerer Road on the western side of State Route 99. With the addition of several new fire stations since the adoption of the EEGSP EIR, the addition of the Project in an area already planned for residential developed would not require additional fire protection facilities.

In addition, development impact fees would be collected and ongoing funding for services would provided via property taxes. Fee programs are regularly evaluated and updated, consistent with Elk Grove General Plan Policy PF-21, to ensure that adequate service levels are maintained. Therefore, this impact is less than significant. **There is no new or substantially more severe significant impact.**

b) **Less Than Significant Impact**. The addition of 213 residential units over what was approved for the Project site in the EEGSP EIR would result in an increase in population within the Project site and therefore increase the demand for police protection services within the site by increasing the calls for service or patrols within the site. However, the addition of housing units within the Project site would not trigger the need for additional police facilities, because additional calls for service could be handled by increasing the number of patrols. Therefore, it is not anticipated that the demand from the Project site would trigger the need for additional police protection facilities.

Like funding for fire protection services, as described above, development impact fees, which would be paid on all 391 residential units and the ongoing payment of property taxes would provide funding to the EGPD to provide for new staff and equipment. Fee programs are regularly evaluated and updated, consistent with Elk Grove General Plan Policy PF-21, to ensure that adequate service levels are maintained. Therefore, this impact is less than significant. **There is no new or substantially more severe significant impact.**

c) **Less Than Significant Impact.** The Project would generate additional students who would attend schools in the EGUSD, which is one of the largest school districts in California with a rapidly growing student population. The district is impacted, and many schools are overcrowded, so all new development within the EGUSD service area creates a need for additional schools.

The proposed Project alone would not trigger the need for additional school facilities, and exceeding school capacity is not considered to cause a physical impact under CEQA. California Government Code Section 65995(h) states that "the payment or satisfaction of a fee, charge or other requirement levied or imposed... [is] deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073, on the provision of adequate school facilities." The proposed Project would be subject to the EGUSD residential fee in place at the time an application is submitted for a building permit and under CEQA, payment of EGUSD residential development fees is considered to mitigate the need for school facilities generated by project implementation. Therefore, anticipated impacts to schools would be considered less than significant. **There is no new or substantially more severe significant impact.**

d) **Less Than Significant Impact.** The City requires the dedication of land or in-lieu fees equivalent to 5 acres per 1,000 people. The EEGSP provided for 11 parks on more than 90 acres, as well as approximately 162 acres of open space located throughout the EEGSP area. One of the parks included was planned to be partially located within the northeast

corner of the Project site. That park, the Derr-Okamoto Park, has been partially developed north of the Project site, and the Project would add to acreage of the park.

The EEGSP EIR determined that the overall parkland dedication in the EEGSP area would exceed the parkland dedication requirement of 0.0138 acres per residential unit (approximately 5 acres per 1,000 people). Based on this ratio, development of the Project as modified would require the dedication of approximately 5.4 acres of parkland. The modified Project would add 6.7 acres to the partially developed Derr-Okamoto Park, which satisfies the requirement. With the acreage of parkland exceeding the requirement, there would be no deficiency of parkland or associated recreation services that would require residents living with the Project site to seek recreational opportunities elsewhere, thereby increasing the use of other facilities and services to the point that they experience accelerated deterioration and must expand or provide additional facilities. Therefore, this impact is less than significant. **There is no new or substantially more severe significant impact.**

e) **Less Than Significant Impact.** The Project is anticipated to result in a population increase of approximately 1,200, which is 654 persons more than assumed in the EEGSP EIR. This increase in population would cause an associated increase in demand for library services. Current library services that would serve the Project site include the Elk Grove Public Library, the Sacramento Public Library Elk Grove Branch, and the Franklin Community Library. According to the EEGSP, a combined regional and community library facility network is planned to serve the EEGSP area. The proposed Project would not result in population growth such that new library facilities would need to be constructed, nor would it result in deterioration of facilities, given the project population relative to the population in the City. Therefore, impacts to library services are considered less than significant. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
15. RECREATION					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐	No
b) Does the project include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐	No

EXISTING SETTING

In addition to park facilities, the Cosumnes Community Services District (CCSD) provides recreation services to the Elk Grove community. The district offers recreation programs for all ages, including special events, preschools, summer camps, teen programs, special interest classes, before- and after-school recreation, nontraditional sports, therapeutic recreation, youth and adult sports, and aquatic programming (CCSD 2013b).

PROJECT IMPACTS AND MITIGATION MEASURES

a–b) Less Than Significant Impact. See item d) in subsection 14, Public Services. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
16. TRANSPORTATION/TRAFFIC. Would the project:					
a) 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?	☐	☐	☒	☐	No
b) 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?	☐	☐	☒	☐	No
c) 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?	☐	☐	☐	☒	No
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒	No
e) Result in inadequate emergency access?	☐	☐	☐	☒	No
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒	No

EXISTING SETTING

This analysis is based on the information and conclusions of the traffic study prepared for the proposed Project by Fehr & Peers in July 2013. The traffic study can be found in **Appendix H.**

TRANSPORTATION SYSTEM

Roadway System

The following describes the freeway facilities and local roadways that serve the Project site:

- **Grant Line Road** is generally an east–west arterial roadway that borders the southern property line of the proposed Project site. Grant Line Road is two lanes along the Project frontage and provides direct access to State Route (SR) 99. Grant Line Road has an at-grade two-lane crossing of the Union Pacific Railroad (UPRR) just west of the proposed Project. Grant Line Road widens from two to six lanes between the UPRR and SR 99. Adjacent to the proposed Project, Grant Line Road carries about 12,300 vehicles a day.

- **Elk Grove Boulevard** is an east–west arterial roadway that travels from Grant Line Road through Elk Grove where it terminates at Interstate 5. Between Grant Line Road and Waterman Road, Elk Grove Boulevard is two lanes with single-lane roundabouts at Black Swan Drive and Mainline Drive. This segment is fully improved with sidewalks, bike lanes, raised medians, and landscaping. From the Project, Elk Grove Boulevard would be accessed by traveling north on Mainline Drive or using Mainline Drive to access Black Swan Drive. Between Waterman Road and Bradshaw Road, Elk Grove Boulevard carries about 7,800 vehicles a day.

- **Waterman Road** is a north–south arterial roadway that begins at Grant Line Road. Waterman Road is a two- to four-lane roadway and is planned as a four-lane roadway in the General Plan. The intersections at Elk Grove Boulevard and Grant Line Road are fully improved to accommodate their General Plan designation and have traffic signal control. From the Project, direct access to Waterman Road would be achieved by traveling west on Mainline Drive.

- **Bradshaw Road** is a north–south arterial roadway that begins at Grant Line Road. Bradshaw Road is currently two lanes near the Project and is planned to be six lanes in the General Plan. The intersections at Grant Line Road and Elk Grove Boulevard have side-street and all-way stop control, respectively.

- **Mainline Drive** is a two-lane residential collector roadway that traverses from Waterman Road to the west to Elk Grove Boulevard to the north. Mainline Drive's intersection at Waterman Road is all-way stop controlled, and it forms the south leg of a single-lane roundabout at Elk Grove Boulevard.

- **Wyland Drive** is a two-lane north–south residential collector roadway that begins at Mainline Drive and is the western boundary of the proposed Project.

Bicycle and Pedestrian Facilities

Class II bicycle lanes (on-street with signage and striping) and sidewalks are provided in both directions on all improved segments of Elk Grove Boulevard and Waterman Road. 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.

Transit Facilities

Transit service within the study area is provided by e-Tran, which operates nine local routes in Elk Grove and nine commuter routes with service to Downtown Sacramento. One local route (Route 156 – Bruceville/Elk Grove Boulevard) and two commuter routes (Route 58 – East Elk Grove Express and Route 70 – Bradshaw Express) provide service within the study area.

PROJECT IMPACTS AND MITIGATION MEASURES

a–b) Less Than Significant Impact. The EEGSP EIR states that the urbanization of the EEGSP area would significantly increase traffic, which would be introduced onto a road system that is partially rural in character in the vicinity of the site, but which has become heavily urbanized and utilized near new residential developments. The EEGSP EIR concluded that many planned road improvements would mitigate for most of the impacts of the Cumulative + Project (EEGSP) scenario. The Transportation and Circulation Section of the EEGSP EIR anticipated substantial traffic generation upon ultimate development of the EEGSP area. The proposed Project would result in an additional 213 single-family residential units over that which was evaluated in the EEGSP EIR.

The traffic study for the Project evaluated the potential impacts on traffic that could result from the proposed Project modifications over what was previously evaluated in the EEGSP EIR. The traffic study determined that the entire Project would be expected to generate 293 weekday AM peak-hour trips, 391 weekday PM peak-hour trips, and 3,722 trips on a daily basis.

The increase in the number of trips would result in slight increases in level of service (LOS) at several intersections during the AM and PM peak hour, including:

- Elk Grove Boulevard/Waterman Road
- Elk Grove Boulevard/Bradshaw Road
- Elk Grove Boulevard/Grant Line Road
- Mainline Drive/Waterman Road
- Mainline Drive/Wyland Drive

The following intersections would experience an increase in level of service only during the PM peak hour:

- Grant Line Road/Bradshaw Road
- Grant Line Road/Waterman Road

While LOS would be expected to increase at these intersections, none of the study intersections would experience increases that exceed the City threshold for acceptable level of service.

The traffic study also concluded that daily traffic volume would increase at the following roadway segments:

- Grant Line Road–Waterman Road to Bradshaw Road
- Elk Grove Boulevard–Waterman Road to Bradshaw Road

The Grant Line Road–Waterman Road to Bradshaw Road segment would experience an increase in the volume-to-capacity (V/C) ratio from 0.68 to 0.72. The V/C ratio for the Elk Grove Boulevard–Waterman Road to Bradshaw Road segment would remain consistent at 0.44 under both existing conditions and Existing + Project conditions. Similar to intersection operations, while there would be slight increases in daily traffic volumes along these roadway segments, they would continue to operate acceptably at LOS C or better.

All of the study intersections and roadway segments would continue to operate at acceptable LOS, making the Project consistent with all applicable traffic policies and plans, congestion management programs. Therefore, this impact is considered to be less than significant. **There is no new or substantially more severe significant impact.**

c) **No Impact.** There are no public airports in the City of Elk Grove, and the only private airport in the vicinity of the Project site is the Sunset Skyranch Airport, located just southeast of Grant Line Road from the Project site. However, as mentioned in the Project Description, the airport has lost its use permit, so the Project would not interfere with air traffic patterns. Therefore, no impact would occur. **There is no new or substantially more severe significant impact.**

d) **No Impact.** The Project has been designed in accordance with City road and improvement standards and the street sections approved in the EEGSP area. The proposed Project would not result in the development of any new hazards or potential incompatibilities. Therefore, there are no increases in hazards that can be attributed to transportation design features, and the Project would have no impact associated with hazards due to roadway design features. **There is no new or substantially more severe significant impact.**

e) **No Impact.** As described under item d) above, the Project has been designed in accordance with City road and improvement standards. Therefore, the Project would provide adequate emergency access, and no impact would occur. **There is no new or substantially more severe significant impact.**

f) **No Impact.** The Project does not propose any uses that would interfere with policies, plans, or programs for public transit, bicycle, or pedestrian facilities. The traffic study determined that implementation of the proposed Project would not disrupt or interfere with existing bicycle or pedestrian facilities, and would not disrupt or interfere with the implementation of any planned bicycle or pedestrian facilities or disrupt or interfere with existing or planned transit operations or facilities. Therefore, no impact would occur. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
17. UTILITIES AND SERVICE SYSTEMS. Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	No
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	No
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	No
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐	No
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☒	☐	No
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	No
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐	No

EXISTING SETTING

WATER SUPPLY

Elk Grove Water District and Sacramento County Water Agency

The Project site is located within the service area of the Elk Grove Water District (EGWD), which receives water supplies from the Sacramento County Water Agency (SCWA). Within the SCWA, the Project site is located in the boundaries of SCWA service areas Zone 41 and Zone 40 (Zone 41 includes all of Zone 40). Zone 40 generates revenue for its capital program through development fees and from special development capital fees collected bimonthly from Zone 41 retail water service customers in Zone 40 and wholesale water service customers in the Elk Grove Water Service area. In April 1999, the SCWA expanded Zone 40 boundaries and scope to include large areas in the southern part of Sacramento County and to include the use of recycled water in conjunction with groundwater and surface water. On completion of construction of Zone 40 water facilities, the facilities are granted over to Zone 41 for long-term operations and maintenance and eventually replacement as facilities become older (SCWA 2011, p. 2-4).

The EGWD operates its own water supply facilities and has prepared its own Urban Water Management Plan (UWMP). The service area for the EGWD is separated into two subareas: Tariff Area No. 1, served with water pumped from EGWD-owned wells, and Tariff Area No. 2, served with water supplies purchased from the SCWA (EGWD 2011, p. 5). The Project site is located in Tariff Area No. 2. Because Tariff Area No. 2 receives water supplies from the SCWA, the EGWD is responsible only for the distribution mains in Tariff Area No. 2 (EGWD 2011, p. 5). Other relevant water supply infrastructure is owned and operated by SCWA Zone 41.

Tariff Area No. 2 served a population of approximately 12,000 in 2010 and is expected to serve 20,160 residents by 2035. The entire EGWD service area served 34,550 people in 2010 and is projected to increase to 46,460 people by 2035 (EGWD 2011, p. 9).

The EGWD has a goal to reduce per capita water use by 20 percent by 2020. Based on the 2010 rate of 253 gallons per capita per day (gpcd), the 2020 goal would be 202 gpcd (EGWD 2011, p. 11). In Tariff Area No. 2, total water delivery was 2,935 acre-feet per year (AFY) (EGWD 2011, p. 15). The projected water demand for Tariff Area No. 2 in 2035 is expected to be 4,560 AFY (EGWD 2011, p. 18). The contracted volume of water to be supplied to the EGWD for Tariff Area No. 2 customers in 2035 is expected to be 4,600 AFY. The existing contracted volume (as of 2010) was for 2,935 AFY (EGWD 2011, p. 20). The EGWD's agreement with the SCWA is to provide the water necessary to serve Tariff Area No. 2 (EGWD 2011, p. 21). The SCWA Urban Water Management Plan anticipates the sale of 4,600 AFY of water supplies to the EGWD in 2035 (SCWA 2011, p. 4-17), consistent with the findings of the EGWD UWMP.

In Zone 41, the SCWA expects that by 2035, total water supply would be 120,698 AFY and demand would be 87,567 AFY, leaving a surplus of 31,788 AFY (29 percent). Supply and demand are expected to remain the same in single dry-year and multiple dry-year scenarios (SCWA 2011, pp. 7-2–7-5). During dry periods, the SCWA would reduce its surface water supplies and supplement with groundwater supplies to keep the total water supply constant. The SCWA does not anticipate groundwater supply shortages (SCWA 2011, p. 7-5).

Water Supply Facilities

To meet the demands for the entire SCWA service area, including Zone 41 and EGWD Tariff Area No 2, the SCWA has constructed, and is planning to construct, several new water supply facilities. Each of the improvements is expected to change the water supply mix. The Vineyard Surface Water Treatment Plant (WTP) came online in 2011 to aid in reducing the Sacramento region's reliance on groundwater supplies. It has the capacity to treat 50 million gallons per day (mgd). A second phase of the Vineyard WTP is planned for 2033 and would provide an additional 50 mgd of water treatment capacity. Some of the future SCWA-planned water supply projects that would likely provide some benefit to the Project site include the East Elk Grove Groundwater WTP and the Bond Groundwater WTP. The East Elk Grove Groundwater WTP is planned to begin construction in 2018, with completion in 2020. That facility would provide a maximum of 13 mgd. The Bond Groundwater WTP would provide 6.5 mgd and would be constructed sometime after 2035. (SCWA 2011)

WASTEWATER COLLECTION AND TREATMENT

Sacramento Regional County Sanitation District

Wastewater treatment for the Project area is provided by the Sacramento Regional County Sanitation District (SRCSD), which serves approximately 1.4 million people. The SRCSD owns and operates the regional wastewater conveyance system and the Sacramento Regional Wastewater Treatment Plant (SRWTP), located at 8521 Laguna Station Road. The SRCSD's contributing agencies—the Sacramento Area Sewer District (SASD) and the cities of Folsom, West Sacramento, and Sacramento—each collect wastewater, while the SRCSD is responsible for major conveyance, wastewater treatment, and wastewater disposal. The SRWTP usually treats an average of 150 million gallons per day, but in 2012 the average was 124 mgd because it was a dry year. The SRWTP is permitted to treat 181 mgd average dry weather flow (SRCSD 2012). At the Sacramento Regional Wastewater Treatment Plant, the wastewater undergoes a secondary treatment process, after which it is discharged into the Sacramento River.

The Sacramento Regional Wastewater Treatment Plant 2020 Master Plan for the SRWTP provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements in the SRCSD service area through the year 2020. The master plan uses Sacramento Area Council of Governments (SACOG) population projections multiplied by per capita flow and load values to determine future facilities needs (SRCSD 2008, p. 14). The current SRWTP capacity of 185 mgd falls short of the projected 218 mgd average dry weather flow in 2020. Therefore, the SRWTP has been master planned to accommodate 350 mgd average dry weather flow (SRCSD 2008, p. 15). In addition, the SRCSD has prepared a long-range master plan for the large-diameter interceptors that transport wastewater to the Sacramento Regional Wastewater Treatment Plant. The master plan includes interceptor upgrades/expansions to accommodate anticipated growth through 2035 (SRCSD 2008, p. 5).

Sacramento Area Sewer District

The Sacramento Area Sewer District (SASD), formerly known as County Sanitation District-1, provides wastewater collection services in the urbanized unincorporated area of Sacramento County, in the cities of Citrus Heights, Elk Grove, and Rancho Cordova, and in a portion of the cities of Sacramento and Folsom. The SASD owns, operates, and maintains a network of 4,400 miles of main line and lower lateral pipes in a 270-square-mile area (SASD 2012). The collection system pipelines are categorized and based on size, function, and hydraulic capacity. Trunk

sewers are pipes that function as conveyance facilities to transport the collected wastewater flows to the SRCSD interceptor system. The collection system within the Project area includes trunks, which are designed to carry flows from 1 to 10 mgd, and laterals, which are designed to carry flows of less than 1 mgd. The existing Elk Grove trunk line extends southeast from the Sacramento Regional Wastewater Treatment Plant influent diversion structure to Laguna Boulevard, then parallel to SR 99 along East Stockton Boulevard extending close to the southern City boundary.

STORM DRAINAGE INFRASTRUCTURE

The Project site is located with the Hudson Basin, which serves the existing development north and south of Elk Grove Creek in the EEGSP area. According to the Drainage Master Plan prepared for the proposed Project (Wood Rodgers 2013), Elk Grove Creek cannot contain 100-year storm events west of Waterman Road, so all development upstream of Waterman Road is required to mitigate peak flows. The Drainage Master Plan was prepared using current Project assumptions.

SOLID WASTE

Residential solid waste services in the City of Elk Grove are provided by Republic Services under an exclusive franchise agreement (Elk Grove 2013b). Commercial waste in Elk Grove, which includes waste generated by multi-family residential developments, is an "open market," meaning that commercial and multi-family waste in the City is hauled by any permitted hauler selected by the development and is hauled to a variety of permitted landfills chosen by the hauler. Solid waste generated in Elk Grove is taken to a variety of landfills. **Table 11** shows landfills used by the City of Elk Grove and the permitted and remaining capacities of those landfills. As shown, the majority of the landfills serving Elk Grove waste haulers have over 70 percent remaining capacity (CalRecycle 2013).

TABLE 11
DISPOSAL FACILITIES USED BY ELK GROVE AND THEIR CAPACITIES 2005

Facility	Total Estimated Permitted Capacity (in cubic yards)	Total Estimated Capacity Used		Remaining Estimated Capacity	
		Cubic Yards	Percentage	Cubic Yards	Percentage
Altamont Landfill & Resource Recovery (01-AA-0009)	62,000,000	16,280,000	26.3%	45,720,000	73.7%
Hay Road Landfill, Inc. (B + J Landfill) (48-AA-0002)	28,240,000	5,763,569	20.4%	22,476,431	79.6%
Bakersfield Metropolitan (Bena) SLF (15-AA-0273)	53,000,000	8,181,042	15.4%	44,818,958	84.6%
Foothill Sanitary Landfill (39-AA-0004)	102,000,000	4,100,000	4%	97,900,000	96%
Forward Landfill, Inc. (39-AA-0015)	51,040,000	11,008,942	21.6%	40,031,058	78.4%
Keller Canyon Landfill (07-AA-0032)	75,018,280	6,738,610	9%	68,279,670	91%
L and D Landfill Co. (34-AA-0020)	6,031,055	1,931,055	32%	4,100,000	68%
North County Landfill (39-AA-0022)	17,300,000	-300,000	-1.7%	17,600,000	101.7%
Potrero Hills Landfill (48-AA-0075)	13,300,000	21,500,000	61.9%	8,200,000	38.1%
Sacramento County Landfill (Kiefer) (34-AA-0001)	117,400,000	4,500,000	3.8%	112,900,000	96.2%

Source: CalRecycle 2013

PROJECT IMPACTS AND MITIGATION MEASURES

a–b) and d–e) Less Than Significant Impact. The EEGSP EIR determined that new water supply facilities, including conveyance infrastructure and groundwater wells, would be needed to serve the EEGSP area, including the Project site. Water delivery infrastructure has since been developed in the EEGSP area, with the exception of the individual service connections in the remaining undeveloped portions of the Specific Plan area, including the Project site. The proposed Project would increase the number of water service connections by 213 units over what was analyzed in the EEGSP EIR.

Because the proposed Project will be required to comply with the updated Title 24 standards, including standards that require new buildings to reduce water consumption by 20 percent, water demand rate of 202 gallons per capita per day from the EGWD 2010 Urban Water Management Plan were used for the Project. Based on this rate, the Project would have a water demand of approximately 271.5 AFY (242,400 gpd).

The Urban Water Management Plans for both the EGWD and the SCWA determined that water supplies would be adequate to serve customers in their service areas through 2035. Specifically, the SCWA predicted a surplus of 31,788 AFY in 2035, even during multiple dry years. This surplus is more than sufficient to provide 269 AFY for use within the Project site.

Much of the predicted water supply surplus would be provided by improvements to the Vineyard Surface WTP and development of new groundwater WTPs, which are planned to increase the SCWA's total water supply and to provide reliability to its water supply. These water supply improvement projects will be developed independent of the proposed Project. Aside from the water supply infrastructure that would be constructed within the Project site to provide individual connections to the water system and to connect to the existing water delivery lines, no additional infrastructure would be needed for water delivery or water supply. Impacts associated with the construction of individual water connections are a part of the Project and are assumed in the analysis throughout this Initial Study.

Similarly, impacts associated with demand for wastewater treatment services and infrastructure are analyzed in the EEGSP EIR. The EEGSP EIR found that the capacity of the Sacramento Regional Wastewater Treatment Plant was adequate to serve development in the EEGSP area. Based on the average household size in Elk Grove (3.07 persons per household) and average wastewater generation rate (132.4 gallons per capita per day) from the Elk Grove General Plan EIR, the Project would result in an increased demand of approximately 159,000 gallons per day. The SRWTP currently has treatment capacity for more than 30 million gallons per day during an average year. The additional proposed units would not result in the need for additional treatment capacity.

The major conveyance infrastructure for water and wastewater has already been constructed to connect the existing development in the EEGSP area to water supply and wastewater infrastructure. The Project would require the construction of service connections within the Project site. The approved EEGSP EIR considered the ground disturbance that would be necessary to construct water supply and wastewater connections at the Project site. The addition of 213 additional units to areas where the possible environmental effects of ground disturbance has already been considered would not result in new impacts or the need for additional mitigation. In addition, because the SRWTP has capacity for the Project-generated wastewater, the additional units proposed would not create any additional impacts associated with the wastewater treatment requirements of the Regional Water Quality Control Board. Therefore, this impact is considered to be less than significant. **There is no new or substantially more severe significant impact.**

c) **Less Than Significant Impact.** Impacts associated with stormwater drainage are analyzed in the EEGSP EIR, which concluded that additional stormwater capacity was needed to accommodate increased flows from development of the EEGSP area. As development has occurred within the EEGSP area, this impact has not been fully mitigated. Elk Grove Creek currently cannot accommodate stormwater flows from areas east of Waterman

Road, which includes the Project site. As the area has developed, conditions in the creek have become worse.

A Drainage Master Plan has been prepared for the proposed Project to provide recommendations for mitigating drainage issues downstream to ensure that flows from the Project site do not exacerbate conditions. The Project has been designed with the recommendations of the Drainage Master Plan. To construct the Project as it is currently approved, pursuant to the EEGSP EIR, stormwater flows would not be mitigated based on the existing conditions, which have become worse since the EEGSP EIR was approved. The Project has been designed with two detention basins at the southern end of the open space drainage corridor bisecting the Project site to capture flows before they reach Elk Grove Creek at the southern edge of the site to equal flows that are equal to or less than peak flows reported in the City's Storm Drainage Master Plan (Wood Rodgers 2013). Therefore, since the Project has been designed to mitigate flows, development of the proposed Project would improve stormwater conditions downstream. Therefore, this impact is less than significant. **There is no new or substantially more severe significant impact.**

f–g) **Less Than Significant Impact.** The adopted EIR found that the built-out EEGSP would generate approximately 7,500 tons of solid waste per year, which would not be substantial when compared to the available capacity of the Sacramento County Landfill. The analysis estimated that each household would generate 9.1 pounds of solid waste per day. Based on this generation rate, the additional units proposed by the Project would generate approximately 3,560 pounds per day (650 tons per year). The Sacramento County Landfill is permitted to accept as much as 10,815 tons per day and as of 2010, had more than 96 percent remaining capacity. Therefore, the solid waste generated by the Project would not be likely to result in the need for additional solid waste facilities. In addition, the Project does not contain any uses or components that would not be consistent with all applicable solid waste regulations and policies. It is also worth mentioning that since the EEGSP EIR was adopted, solid waste diversion rates for recycling have increased throughout the state, largely due to the California Integrated Waste Management Act (AB 939), so it is probable that the solid waste generation rate has gone down since the EIR was adopted in 1995. This impact is less than significant. **There is no new or substantially more severe significant impact.**

Mitigation Measures

No new mitigation required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	New Impact or Increase Severity of Previous Significant Impact?
18. MANDATORY FINDINGS OF SIGNIFICANCE.					
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐	No
b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	☐	☐	☒	☐	No
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐	No

DISCUSSION

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

a–c) **Less Than Significant Impact.** This Initial Study determined that all potential impacts associated with the potential to degrade the quality of the environment would be less than significant or could be mitigated to less than significant levels with the mitigation measures that are provided in this document. None of the less than significant impacts were determined to be cumulatively considerable. In addition, since the Project is a part of the EEGSP, potential impacts associated with large-scale development of the EEGSP area were previously considered in the EEGSP EIR. While the Project represents a change from what was analyzed on the Project site as part of the EEGSP EIR analysis, that EIR's analysis addressed cumulative impacts, and the proposed Project would not substantially increase the cumulative contribution from the EEGSP or result in any new cumulatively considerable impacts. Mitigation measures will be implemented where

appropriate, thereby reducing impacts resulting from this Project to a less than significant level. **There is no new or substantially more severe significant impact.**

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EXHIBIT B

MITIGATION MONITORING AND REPORTING PROGRAM

FOR THE

FIELDSTONE NORTH PROJECT

PREPARED BY:

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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 Fieldstone North Mitigated Negative Declaration (MND).

MITIGATION MEASURES

The mitigation measures are taken from the Fieldstone North MND. The mitigation measures are assigned the same number they had in the MND. 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.

The MND was prepared as a subsequent MND, analyzing the modifications to the project approved as part of the East Elk Grove Specific Plan (EEGSP) Environmental Impact Report (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 EEGSP EIR, a subsequent MND was necessary for the proposed Project. The Fieldstone North Project is subject to the adopted mitigation measures described in the Mitigation Monitoring and Reporting Program (MMRP) for the EEGSP EIR.

MMRP COMPONENTS

The components of each monitoring form are addressed briefly, below.

Mitigation Number: This is the number given the mitigation measure in the MND.

Mitigation Measure: All mitigation measures that were identified in the MND 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.

MM Number	Mitigation Measure	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
AIR-1	To ensure generation of PM_{10} does not exceed standards, ground-disturbing activities during construction shall not exceed the SMAQMD's screening criterion of 15 acres on any day.	During construction activities	City of Elk Grove Planning Department	
BIO-1	**Special-Status Plant Surveys.** The Project proponent shall retain a qualified biologist to perform focused surveys to determine the presence/absence of special-status plant species with potential to occur in and adjacent to (within 25 feet, where appropriate) the proposed impact area, including construction access routes. These surveys shall be conducted in accordance with CDFW *Guidelines for Assessing Effects of Proposed Developments on Rare Plants and Plant Communities* (Nelson 1994). These guidelines require that rare plant surveys be conducted at the proper time of year, May-June, when rare or endangered species are both evident and identifiable. Field surveys shall be scheduled to coincide with known flowering periods, and/or during appropriate developmental periods that are necessary to identify the plant species of concern. If the surveys do not find any state or federal listed plant species in or adjacent to (within 25 feet) the proposed impacts area, no further action is required. If any state- or federally listed, CNPS List 1, or CNPS List 2 plant species are found in or adjacent to (within 25 feet) the proposed impact area during the surveys, these plant species shall be avoided and the following mitigation measures shall be implemented:	Prior to the initiation of construction activities	City of Elk Grove Planning Department	

	1. In some cases involving state-listed plants, it may be necessary to obtain an incidental take permit under Section 2081 of the FGC (2081 permit). The Project proponent shall consult with the CDFW to determine whether a 2081 permit is required, and obtain all required authorizations prior to initiation of construction activities. 2. Before the approval of grading plans or any ground-breaking activity within the Project area, the Project proponent shall submit a mitigation plan concurrently to the CDFW and the USFWS (if appropriate) for review and comment. The plan shall include mitigation measures for the population(s) to be directly affected. Possible mitigation for impacts to special-status plant species can include implementation of a program to transplant, salvage, cultivate, or re-establish the species at suitable sites (if feasible) or through the purchase of credits from an approved mitigation bank, if available. The actual level of mitigation may vary depending on the sensitivity of the species, its prevalence in the area, and the current state of knowledge about overall population trends and threats to its survival. The final mitigation strategy for directly impacted plant species shall be determined by the CDFW and the USFWS (if appropriate) through the mitigation plan approval process. 3. Any special-status plant species that are identified adjacent to the Project area, but not proposed to be disturbed by the Project, shall be protected by barrier fencing to ensure construction activities and material stockpiles do not impact any special-status plant species. These avoidance areas shall be identified on Project plans.			
BIO-2	**Consultation with US Fish and Wildlife Service.** The Project proponent shall either assume presence of special-status vernal pool invertebrates or have a qualified biologist conduct a survey for Federally-listed Large Branchiopods (vernal pool fairy shrimp and vernal pool tadpole shrimp). If the survey concludes absence of vernal pool fairy shrimp and vernal pool tadpole shrimp, no further mitigation is required.	Prior to the initiation of construction activities	City of Elk Grove Planning Department	

	If special-status invertebrates are determined to be present, or if presence is assumed, the Project proponent shall mitigate consistent with the future Biological Opinion, mitigating with 1 acre of vernal pool preservation for every 1 acre of directly affected special-status shrimp habitat (1:1 ratio), as well as 1 acre of vernal pool creation for every 1 acre of directly affected special-status shrimp habitat (1:1 ratio). The preliminary jurisdictional determination identified 0.453 acre of vernal pools in the project footprint; therefore 0.453 acre of preservation and .0453 acre of creation. (NOTE: There is no City-adopted policy supporting the higher mitigation ratio, this is not critical habitat, this is not within the Mather Core recovery area, it is a highly disturbed site and there is no evidence of shrimp.) Provided that the mitigation land satisfies the criteria set forth in both mitigation measure **BIO-7** and this mitigation measure, land acquired to meet the habitat mitigation requirements of this mitigation measure, and/or any additional habitat mitigation that is required by any governmental agency for any development project undertaken pursuant to the proposed Project, may occur within and also be counted toward the required waters of the United States obligation set forth in mitigation measure **BIO-7**.			
Bio-3	**Swainson's Hawk Foraging Habitat.** The Project applicant shall acquire conservation easements or other instruments to preserve suitable foraging habitat for Swainson's hawk, as determined by the CDFW. The location of mitigation parcels as well as the conservation instruments protecting them shall be acceptable to the City. The amount of land preserved shall be governed by a 1:1 mitigation ratio for each acre developed at the Project site. The preservation of land shall be done prior to any site disturbance, such as clearing or grubbing, or the issuance of any permits for grading, building, or other site improvements, whichever occurs first. In addition, the City may impose the following conservation easement content standards: a) The land to be preserved shall conform with CDFW guidelines on suitable Swainson's hawk foraging habitat.	Prior to construction activities	City of Elk Grove Planning Department	

	b) All owners of the mitigation land shall execute the document encumbering the land. c) The document shall be recordable and contain an accurate legal description of the mitigation land. d) The document shall prohibit any activity that substantially impairs or diminishes the land's capacity as suitable Swainson's hawk foraging habitat. e) If the land's suitability as foraging habitat is related to existing agricultural uses on the land, the document shall protect any existing water rights necessary to maintain such agricultural uses on the land covered by the document, and retain such water rights for ongoing use on the mitigation land. f) The applicant shall pay to the City a mitigation monitoring fee to cover the costs of administering, monitoring, and enforcing the document in an amount determined by the receiving entity, not to exceed 10 percent of the easement price paid by the applicant, or a different amount approved by the City Council, not to exceed 15 percent of the easement price paid by the applicant. g) Interests in mitigation land shall be held in trust in perpetuity by the City or an entity acceptable to the City. The entity shall not sell, lease, or convey any interest in mitigation land which it shall acquire without the prior written approval of the City. h) The City shall be named a beneficiary under any document conveying the interest in the mitigation land to an entity acceptable to the City. i) If any qualifying entity owning an interest in mitigation land ceases to exist, the duty to hold, administer, monitor, and enforce the interest shall be transferred to the City or to another entity acceptable to the City. j) Land used for Swainson's Hawk mitigation may also be used for other types of compatible mitigation (vernal pool, species, wetlands, etc.) Before committing to the preservation of any particular land pursuant to this measure, the Project applicant shall obtain the City's approval of the land proposed for preservation.			

BIO-4	**Burrowing Owl Preconstruction Surveys.** If clearing and construction activities would occur during the nesting period for burrowing owls (February 1–August 31), a qualified biologist shall conduct focused surveys for burrowing owls on the Project site within 30 days prior to construction initiation. Surveys shall be conducted in accordance with the CDFG's *Staff Report on Burrowing Owl Mitigation*, published March 7, 2012. Surveys shall be repeated if Project activities are suspended or delayed for more than 15 days during nesting season. If no burrowing owls are detected, no further mitigation is required. If active burrowing owls nest sites are detected, the Project proponent shall implement the avoidance, minimization, and mitigation methodologies outlined in the CDFW's *Staff Report on Burrowing Owl Mitigation* prior to initiating Project-related activities that may impact burrowing owls.	Prior to construction activities	City of Elk Grove Planning Department	
BIO-5	**Migratory Bird Surveys.** If clearing and/or construction activities would occur during the migratory bird nesting season (March 15–August 15), preconstruction surveys to identify active migratory bird nests, including tricolored blackbird_ shall be conducted by a qualified biologist within 14 days prior to construction initiation. Focused surveys must be performed by a qualified biologist for the purposes of determining presence/absence of active nest sites within the proposed impact area, including construction access routes and a 200-foot buffer (if feasible). If active nest sites are identified within 200 feet of Project activities, the applicant shall impose a limited operating period (LOP) for all active nest sites prior to commencement of any Project construction activities to avoid construction- or access-related disturbances to migratory bird nesting activities. An LOP constitutes a period during which Project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur, and will be imposed within 100 feet of any active nest sites until the nest is deemed inactive by a qualified biologist. Activities permitted within and the size (i.e., 100 feet) of LOPs may be adjusted through consultation with the CDFW and/or the City.	Prior to construction activities	City of Elk Grove Planning Department	

BIO-6	**Raptor Surveys.** If clearing and/or construction activities would occur during the raptor nesting season (January 15–August 15), preconstruction surveys to identify active raptor nests shall be conducted by a qualified biologist within 14 days prior to construction initiation. Focused surveys must be performed by a qualified biologist for the purposes of determining presence/absence of active nest sites within the proposed impact area, including construction access routes and a 500-foot buffer (if feasible). If active nest sites are identified within 500 feet of Project activities, the applicant shall impose an LOP for all active nest sites prior to commencement of any Project construction activities to avoid construction- or access-related disturbances to nesting raptors. An LOP constitutes a period during which Project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur, and will be imposed within 250 feet of any active nest sites until the nest is deemed inactive by a qualified biologist. Activities permitted within and the size (i.e., 250 feet) of LOPs may be adjusted through consultation with the CDFW and/or the City.	Prior to construction activities	City of Elk Grove Planning *Department*	
BIO-7	**No Net Loss of Federally and/or State Protected Waters.** If federally and/or State protected waters would be impacted by Project-related activities, the Project proponent shall ensure that the Project will result in no net loss of federally and/or State protected waters. No net loss can be achieved through impact avoidance, impact minimization, and/or compensatory mitigation, as determined in CWA Section 404 and 401 permits and/or 1602 Streambed Alteration Agreement. Evidence of compliance with this mitigation measure shall be provided prior to construction and grading activities for the proposed Project. Provided that the mitigation land satisfies the criteria set forth in both mitigation measure **BIO-2** and this mitigation measure, land acquired to meet the waters of the United States and/or waters of the State requirements of this mitigation measure and/or any additional habitat mitigation that is required by any governmental agency for any development project undertaken pursuant to the proposed Project may occur within and also be counted toward the required habitat mitigation set forth in mitigation measure **BIO-2**.	Prior to construction activities	City of Elk Grove Planning Department	

NOI-1	To reduce impacts of traffic noise on future residents of the proposed Project, noise barriers shall be constructed along the Project frontage at Grant Line Road and Bradshaw Road. Depending on the final grading plans and tentative maps, barriers could range between 6 and 8 feet. Final barrier height and design shall be determined by a qualified acoustical professional when final grading plans and subdivision designs are available. The barrier designs shall comply with an exterior noise level standard of 60 dB L_{dn} at the outdoor activity areas.	When final grading plans and subdivision designs are available	City of Elk Grove Planning Department	
NOI-2	When floor plans and elevations have been completed, the Project applicant shall have detailed analysis of interior noise levels conducted by a qualified acoustical professional to ensure compliance with the 45 dB L_{dn} interior noise level standard.	After floor plans and elevations have been completed	City of Elk Grove Planning Department	

CERTIFICATION
ELK GROVE CITY COUNCIL RESOLUTION NO. 2014-14

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, Trigg

NOES: COUNCILMEMBERS: Hume

ABSTAIN : COUNCILMEMBERS: None

ABSENT: COUNCILMEMBERS: None

Jason Lindgren, City Clerk
City of Elk Grove, California