

RESOLUTION NO. 2015-057

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE
ADOPTING A MITIGATED NEGATIVE DECLARATION AND MITIGATION
MONITORING AND REPORTING PROGRAM (MMRP) FOR THE
99 CENTS ONLY STORE PROJECT (EG-14-018)
APN: 121-0140-013**

WHEREAS, the City prepared an Initial Study/Mitigated Negative Declaration pursuant to CEQA, attached hereto as Exhibit A and incorporated herein by reference, evaluating the potential environmental effects of the Project; and

WHEREAS, the City determined that the mitigation measures identified in the Initial Study/Mitigated Negative Declaration would reduce environmental impacts to a less than significant level; 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, Rezone, and Design Review for this Project will have a significant effect on the environment beyond what was analyzed in the Mitigated Negative Declaration prepared for the Project and disclosed; and

WHEREAS, a Mitigation Monitoring and Reporting Program (MMRP) has been prepared in accordance with 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 operation; and

WHEREAS, the City distributed the Notice of Intent to Adopt the Mitigated Negative Declaration on December 19, 2014. It was posted at the Sacramento County Clerk's office, distributed through State Clearinghouse and at the City offices, pursuant to Section 15072 of Chapter 3 of Title 14 of the California Code of Regulations (State CEQA Guidelines). A 30-day review and comment period was opened on December 19, 2014 and closed January 19, 2015. The Mitigated Negative Declaration was made available to the public during this review period; and

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

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

WHEREAS, the City Council has considered the written and oral comments on the proposed project and the Mitigated Negative Declaration; and

WHEREAS, the City of Elk Grove, Development Services, Planning Department, located 8401 Laguna Palms Way, Elk Grove, California 95758 is the custodian of documents and other materials that constitute the record of proceedings upon which the decision to adopt the Mitigated Negative Declaration is based; and

WHEREAS, the City Council has reviewed the Initial Study, the Mitigation Negative Declaration, and the Mitigation Monitoring and Reporting Program and find that these documents reflect their independent judgment.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Elk Grove hereby adopts the Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program for the 99 Cents Only Store Project attached hereto and incorporated herein by this reference based on the following findings:

- 1) On the basis of the whole record, there is no substantial evidence that the Project as designed, conditioned and mitigated, will have a significant effect on the environment. A Mitigated Negative Declaration has been prepared and completed in accordance with the California Environmental Quality Act (CEQA). The Mitigated Negative Declaration reflects the independent judgment and analysis of the City.
- 2) Pursuant to Public Resources Code, Section 21081 and CEQA Guidelines, Section 15091, all of the proposed mitigation measures described in the Mitigated Negative Declaration are feasible, and therefore shall become binding upon the City and affected landowners and their assigns or successors in interest when the Project is approved.
- 3) To the extent that these findings conclude that various proposed mitigation measures outlined in the Mitigated Negative Declaration are feasible and have not been modified, superseded or withdrawn, the City Council hereby binds itself, all landowners within the Project area, and their assigns and successors in interest to implement those measures. These findings are not merely informational, but constitute a binding set of obligations that will come into effect when the City Council issues the Project entitlements set forth above. The actual implementation of the mitigation measures hereby adopted shall occur by having them included as conditions of approval on subsequent discretionary entitlements granted within the Project area.


Evidence: Pursuant to CEQA and the CEQA guidelines, staff prepared an Initial Environmental Study for the 99 Cents Only Store Project and mitigation measures have been developed that will reduce potential environmental impacts to less than significant levels. The Initial Environmental Study identified potentially significant adverse effects in the areas of air quality, greenhouse gases, and noise. Mitigation measures that avoid or mitigate the potentially significant effects to a point where no significant effects would occur were identified in the Initial Study and staff prepared a Mitigated Negative Declaration. Preparation of a Mitigation Monitoring and Reporting Program (MMRP) is required in accordance with the City of Elk Grove regulations and is designed to ensure compliance during project implementation.

The City distributed the Notice of Intent to Adopt the Mitigated Negative Declaration on December 19, 2014. It was posted at the Sacramento County Clerk's office, distributed through State Clearinghouse and at the City offices, pursuant to Section 15072 of Chapter 3 of Title 14 of the California Code of Regulations (State CEQA Guidelines).

A 30-day review and comment period was opened on December 19, 2014 and closed January 19, 2015. The Mitigated Negative Declaration was made available to the public during this review period. The City received four written comment letters within the 30-day public review period. These comments do not alter the conclusions of the Initial Study/Mitigated Negative Declaration.

On the basis of the Mitigated Negative Declaration, environmental analysis, and the whole record, there is no substantial evidence that the project will have a significant adverse impact on the environment above those addressed within the adopted Mitigated Negative Declaration. A Mitigation Monitoring and Reporting Program (MMRP), which is incorporated herein by this reference has been prepared to ensure compliance during project implementation. A condition of approval has been imposed on the project that requires conformance with the MMRP. The City of Elk Grove, Development Services Planning Department, located at 8401 Laguna Palms Way, Elk Grove, California 95758 is the custodian of documents and other materials that constitute the record of proceedings upon which the decision to adopt the Mitigated Negative Declaration is based.

PASSED AND ADOPTED by the City Council of the City of Elk Grove this 25th day of March 2015.



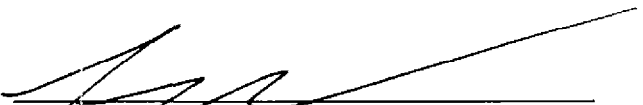
GARY DAVIS, MAYOR of the
CITY OF ELK GROVE

ATTEST:



JASON LINDGREN, CITY CLERK

APPROVED AS TO FORM:



JONATHAN P. HOBBS,
CITY ATTORNEY

CITY OF ELK GROVE
99 CENTS ONLY STORE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Prepared for:

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

Prepared by:

PMC[®]

2729 PROSPECT PARK DRIVE, SUITE 220
RANCHO CORDOVA, CA 95670

DECEMBER 2014

CITY OF ELK GROVE
99 CENTS ONLY STORE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Prepared for:

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

Prepared by:

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2729 PROSPECT PARK DRIVE, SUITE 220
RANCHO CORDOVA, CA 95670

DECEMBER 2014

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1.0 INTRODUCTION

A. PURPOSE AND BACKGROUND OF THE INITIAL STUDY

The City of Elk Grove (City; Elk Grove) is processing an application for the 99 Cents Only Store Project (proposed Project), which requests entitlements for (1) a General Plan Amendment to change the land use designation of the Project site from Office (OF) to Commercial (C), (2) a Rezone to change the zoning of the Project site from Business and Professional Office (BP) to Shopping Center (SC), and (3) Design Review. The entitlements would allow the development of a ±20,000-square-foot retail sales building with a truck loading well and associated parking, landscaping, and asphalt drive aisles on 3.48 acres at 8945 Brown Road in Elk Grove. The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to evaluate the potential environmental effects associated with implementation of the Project and to provide mitigation where necessary to avoid, minimize, or lessen those effects.

An initial study is conducted by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15063, an environmental impact report (EIR) must be prepared if an initial study indicates that the proposed project under review may have a potentially significant impact on the environment that cannot be initially avoided or mitigated to a level that is less than significant. A negative declaration may be prepared if the lead agency also prepares a written statement describing the reasons why the proposed project would not have a significant effect on the environment and therefore why it does not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a negative declaration shall be prepared for a project subject to CEQA when either:

- (a) *The initial study shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or*
- (b) *The initial study identifies potentially significant effects, but:*
 - (1) *Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and*
 - (2) *There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.*

If revisions are adopted in the proposed Project in accordance with CEQA Guidelines Section 15070(b), including the adoption of mitigation measures included in this document, a mitigated negative declaration is prepared.

B. 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..." The City of Elk Grove is the lead agency for the 99 Cents Only Store Project.

C. 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 Planning Department at 8401 Laguna Palms Way, Elk Grove, CA 95758, Monday through Friday, 8:00 AM to 5:00 PM.

- Cultural Resources Assessment, November 2014, Peak & Associates, Inc.
- Geotechnical Study, June 2014, Korbmacher Engineering, Inc.

2.0 PROJECT DESCRIPTION

A. PROJECT LOCATION AND SETTING

The Project site is located in Elk Grove in Sacramento County, California (**Figure 1**). The Project site is located at 8945 Brown Road immediately northeast of the intersection of Elk Grove Florin Road and Brown Road, just under 2 miles east of State Route (SR) 99 and less than one-quarter mile south of the City's northern boundary. The Project site consists of one relatively flat parcel identified as Assessor's Parcel Number (APN) 121-0140-013. An existing wood-framed house and garage are located on the eastern portion of the site. The remainder of the Project site is vacant and covered with grasses and one small orange tree.

North of the Project site is a large retail center anchored by a Bel Air grocery store and a 24 Hour Fitness gym. West of the Project site, west of Elk Grove Florin Road, are a single-family residential subdivision, a large-lot residential property, and vacant land. South of the Project site are a daycare center and an apartment complex. East of the Project site are multiple large-lot residential properties.

B. PROPOSED ACTIONS ADDRESSED IN THE IS/MND

The proposed Project is requesting the following entitlements:

- General Plan Amendment of the Project site from Office (OF) to Commercial (C)
- Rezoning of the Project site from Business and Professional Office (BP) to Shopping Center (SC)
- Design Review

C. REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

This IS/MND may be used to support additional subsequent approvals and permits that may be required from local, regional, state, or federal agencies in the processing of the proposed Project including, but not limited to:

- Sacramento Metropolitan Air Quality Management District (SMAQMD)
- Sacramento Regional County Sanitation District (SRCSD)
- Sacramento County Water Agency (SCWA)

3.0 ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Project Title:

99 Cents Only Store

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 at 8945 Brown Road, immediately northeast of the intersection of Elk Grove Florin Road and Brown Road, less than 2 miles east of State Route (SR) 99 and less than one-quarter mile south of the City's northern boundary. The site identified as APN 121-0140-013 (**Figure 2**).

5. Project Applicant's Name and Address:

Duncan Wallace
 19401 40th Avenue West, Suite 300
 Lynwood, WA 98036

6. General Plan Designation:

Office (OF)

7. Description of Project:

The proposed Project is requesting a General Plan Amendment, Rezone, and Design Review. The entitlements would allow the development of a ±20,000-square-foot retail sales building with a truck loading well and associated parking, landscaping, and asphalt drive aisles on 3.48 acres. The proposed site plan is shown on **Figure 3**.

8. Surrounding Land Uses and Setting:

North of the Project site is a large retail center anchored by a Bel Air grocery store and a 24 Hour Fitness gym. West of the Project site are a single-family residential subdivision, a large-lot residential property, and vacant land. South of the Project site are a daycare center and an apartment complex. East of the Project site are multiple large-lot residential properties.

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.

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology and Water Quality |
| <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |



Figure 2
Project Location

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

Gerald Park
Printed Name

12/19/14
Date

Senior Planner
Title

D. EVALUATION OF ENVIRONMENTAL IMPACTS

Each of the responses in the following environmental checklist considers 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.

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.

4.0 ENVIRONMENTAL ANALYSIS

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the Project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

a, b) **No Impact.** The Sacramento County General Plan Scenic Highways Element designates a scenic corridor extending 660 feet on either side of the right-of-way line of State Route (SR) 99 in the unincorporated areas of the county (Elk Grove 2003, p. 4.11-1). The Project site is not within 660 feet of SR 99 and is located in the urbanized area of Elk Grove rather than in the unincorporated county. Therefore, the Project would not have a substantial adverse effect on a scenic vista or substantially damage scenic resources within a state scenic highway. There would be no impact.

c) **Less Than Significant Impact.** The Project site is currently developed as a residential property with a house and garage on its eastern portion. Immediately north of the Project site is a retail center anchored by a Bel Air grocery store and a 24 Hour Fitness gym. The property south of the Project site, across Brown Road, is developed with a daycare center and an apartment complex. The properties immediately east of the Project site are primarily undeveloped agricultural land with one residence. These properties are designated for future low-density residential development. Properties west of the Project site, across Elk Grove Florin Road, are developed with single-family residential uses.

Implementation of the proposed Project would change the visual character of the site to commercial with a ±20,000-square-foot retail sales building and associated truck loading well, parking, landscaping, asphalt paving for drive aisles, building and parking lot lighting, and signage. However, given the Project site's location adjacent to the shopping center parking lot, the site's visual character is more a continuation of the shopping center and its parking lot than it is residential. In addition, the proposed development would be a continuation of the developed nature of the area to the north and south and would be consistent with the planned urbanization of the project site, which was considered for nonresidential (office) development in the General Plan and analyzed in the General Plan EIR.

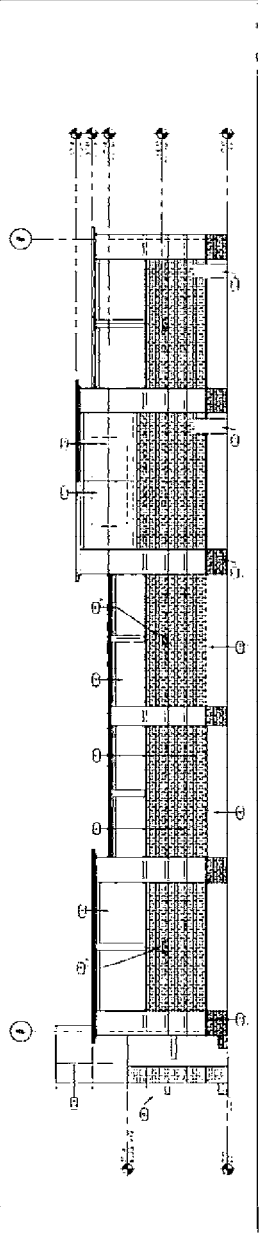
The Project proposes a 6-foot concrete masonry wall and multiple layers of evergreen trees and plants along its eastern boundary to buffer the adjacent property. The Project also proposes landscaping along its western and southern boundaries to provide additional visual buffering of the building and loading dock. The loading dock would be further screened by a truck well screen wall (see **Figure 4**). Furthermore, compliance with the City's Zoning Code and Design Guidelines would ensure that the proposed development features quality design and architecture and that it is compatible with the character of the adjacent uses. Therefore, while the proposed Project would change the site, it would not substantially degrade the visual character or quality of the Project site or its surroundings. This impact would be less than significant.

- d) **Less Than Significant Impact.** The proposed Project would introduce new light sources onto the Project site, which currently has very low lighting levels associated with the existing residence. However, the proposed development would be subject to Elk Grove Municipal Code Chapter 23.56, Lighting, which includes outdoor lighting standards that include shielding requirements, the maximum level of illumination, and the height of outdoor light fixtures. Municipal Code Section 23.16.080, 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 lighting.

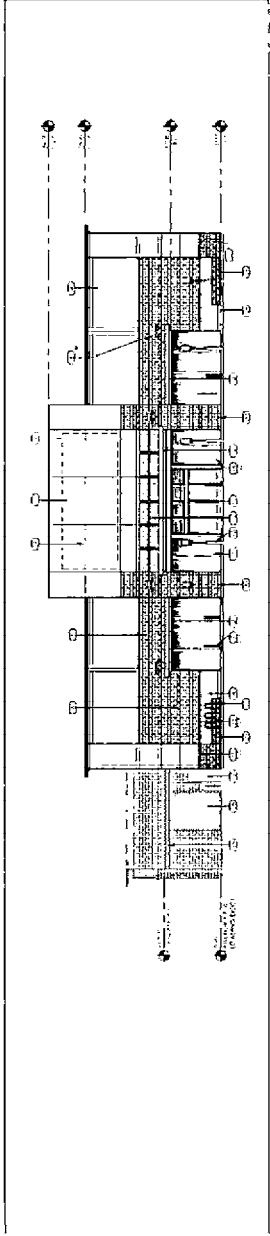
Compliance with applicable City regulations and Design Guidelines would ensure Project lighting is designed in a manner that would minimize impacts to adjacent properties and the night sky, which would be consistent with the analysis in the General Plan EIR. Therefore, this impact would be less than significant.

KEYNOTES

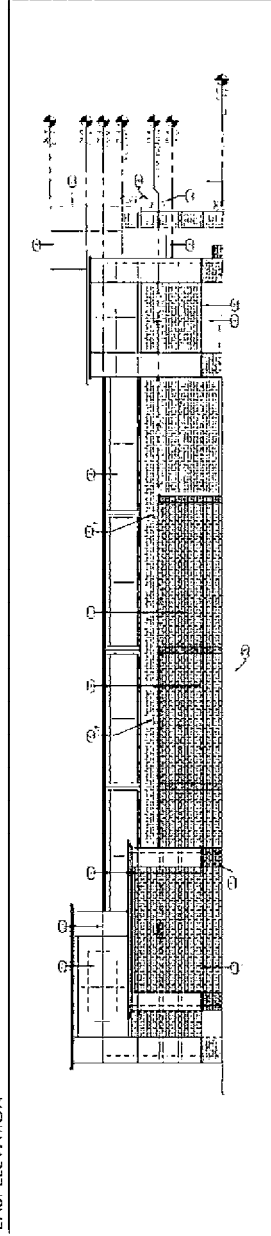
1. SEE CONSTRUCTION NOTES FOR GENERAL NOTES.
2. FINISH GRADE SHALL BE AS SHOWN UNLESS OTHERWISE NOTED.
3. EXISTING GRADE SHALL BE AS SHOWN UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS SHALL BE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
5. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE NOTED.
6. ALL DIMENSIONS SHALL BE TO CENTERLINE UNLESS OTHERWISE NOTED.
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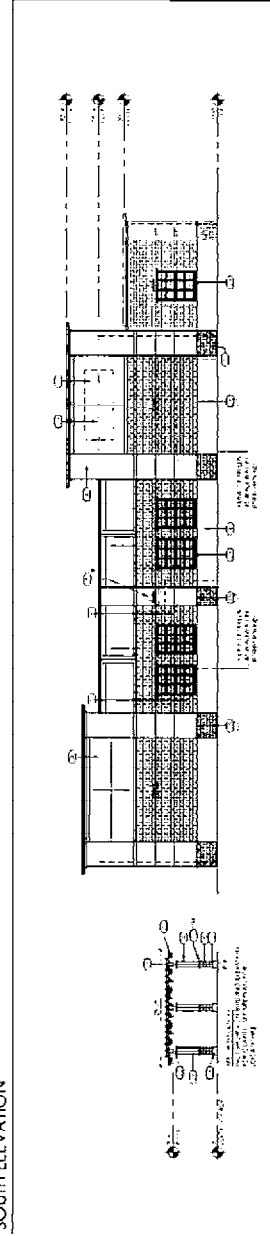
NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION

Source: PM Design Group, Inc. 2014



City of Elk Grove
Development Services

FIGURE 4
Proposed Exterior Elevations

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>2. AGRICULTURE AND FORESTRY 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:</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forestland (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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forestland or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

- a) **No Impact.** The Project site is designated by the Farmland Mapping and Monitoring Program (FMMP) as Urban and Built-Up Land (DOC 2012). Therefore, implementation of the proposed Project would not result in the conversion of any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use, and no impact would occur.
- b) **No Impact.** The Project site is currently zoned Business and Professional Office (BP), which is intended for low- to medium-intensity office development. The Project site is not subject to a Williamson Act contract (DOC 2013). Therefore, implementation of the proposed Project would not conflict with zoning for agricultural use or a Williamson Act contract. There would be no impact.

99 CENTS ONLY STORE PROJECT

- c, d) **No Impact.** Neither the City of Elk Grove nor Sacramento County contains any forestland or land zoned for forestland, timberland, or timberland production. Therefore, no impact would occur.
- e) **No Impact.** The placement of nonagricultural uses adjacent to agricultural uses can result in conflicts that place growth pressure on agricultural lands to convert to urban uses. Neither the Project site nor any adjacent properties contain Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or forestland. Therefore, implementation of the proposed Project would not indirectly convert Important Farmland or forestland to other uses. Therefore, no impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

a) **Less Than Significant Impact.** The Sacramento Metropolitan Air Quality Management District (SMAQMD) coordinates the work of government agencies, businesses, and private citizens to achieve and maintain healthy air quality for the Sacramento area. 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.

The Elk Grove portion of Sacramento County has been designated a nonattainment area for federal ozone and PM_{2.5} air quality standards (CARB 2013), so 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), the PM_{2.5} State Implementation Plan (SIP), and the PM₁₀ 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 particulate matter (PM) emissions from stationary, area, mobile, and indirect sources. The Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan includes 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_{2.5} SIP attempts to fulfill the requirements of the US Environmental Protection Agency (EPA) to redesignate Sacramento County from nonattainment to attainment of the PM_{2.5} national ambient air quality standards, and the PM₁₀ Implementation/Maintenance Plan and Re-Designation Request for Sacramento County attempts to maintain PM₁₀ attainment status.

According to SMAQMD guidance (2011), 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 and/or maintenance status.

The Project site is designated by the Elk Grove General Plan as Office (OF) and zoned Business and Professional Office (BP). The proposed Project includes a request for a General Plan Amendment to change the site's land use designation to Commercial (C) as well as a Rezone to change the site's zoning to Shopping Center (SC). These proposed entitlements will allow the development of an approximately 20,000-square-foot discount retail store on 3.48 acres. This represents a change from the office uses that are currently allowed under the existing designation to retail uses. According to the trip generation rates identified in subsection 16, Transportation/Traffic, of this IS/MND, the proposed retail Project would result in 1,145 average daily trips. City of Elk Grove Municipal Code Section 23.34.040, Development Standards, allows a floor area ratio (FAR) of up to 2.5:1 in the Office district.¹ Assuming a FAR of 0.30, which is substantially lower than allowed, the Project site could accommodate an office development of more than 45,477 square feet. According to the Institute of Transportation Engineers' (2012) 9th Edition Trip Generation Manual, the development of 45,477 square feet of office space allowed under the existing land use designation would result in 500 average daily trips. Therefore, the proposed Project would result in an increase of approximately 645 daily trips compared with the current land use designation.

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 645 additional daily traffic trips spanned 20 miles, the result would be 12,900 VMT, which is an increase of 0.02 percent of the estimated VMT in 2015. Although the Project would result in an increase in the number of trips compared to that analyzed in the Elk Grove General Plan EIR, the resultant VMT from trips generated by the Project, which represents 0.02 percent of the estimated VMT in 2015, would not constitute a substantial increase in VMT from that anticipated in the applicable air quality control plans. As a result, the Project would not conflict with the Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan, PM_{2.5} State Implementation Plan, or the PM₁₀ Implementation/Maintenance Plan and Re-Designation Request for Sacramento County. This impact is less than significant.

- b) **Less Than Significant Impact.** 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-

¹ Floor area ratio is the ratio of the total building square footage to the size of parcel on which it is built. In the case noted here, the code allows building square footage that is 2.5 times the lot square footage, which could be achieved by developing a multi-story building.

based substances during paving activities. Construction activities, such as excavation and grading operations, construction vehicle traffic, and 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 fugitive dust emissions, such as using water or chemicals for control of dust during construction operations, the construction of roadways, or the clearing of land and application of asphalt, oil, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dust. In addition, Elk Grove Municipal Code Chapter 16.44, Land Grading and Erosion Control, requires projects in the City that disturb 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 the City for inspections and enforcement needed to ensure compliance.

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 1**. The Project's complete CalEEMod emissions modeling software output spreadsheets are included in **Appendix A**.

**TABLE 1
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	7.24	39.82	30.00	0.04	7.32	4.32
SMAQMD Potentially Significant Impact Threshold	—	85 pounds/day	—	—	—	—
Exceed SMAQMD Threshold?	—	No	—	—	—	—

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

As shown in **Table 1**, Project emissions resulting from construction would not exceed the SMAQMD significance criterion of 85 pounds per day of NO_x.

The proposed Project has the potential to exceed the PM₁₀ standard. While construction impacts are temporary and would cease once construction is completed, they nevertheless would have an effect on particulate matter emissions during construction activities. The SMAQMD provides screening criteria that can also be used for the evaluation of construction-generated PM₁₀, based on the overall maximum daily area of disturbance associated with proposed projects. Areas of daily disturbance in excess of SMAQMD screening criteria (15 acres) would be considered potentially significant. The Project site is approximately 3.48 acres; therefore, Project

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construction cannot disturb 15 acres of ground. Construction-related air quality impacts will be considered less than significant.

OPERATIONAL EMISSIONS

The SMAQMD (2011) has established significance thresholds to evaluate the potential impacts associated with long-term Project operations. 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 2**, the Project's net operational emissions would not exceed SMAQMD significance criteria of 65 pounds per day of NO_x or ROG. Emissions rates differ from summer to winter, because weather affects factors related to air quality, such as pollutant mixing/dispersion and ozone formation. Because the Project would not exceed SMAQMD thresholds for NO_x or ROG, the Project's operational emissions would not result in a significant long-term regional air quality impact.

**TABLE 2
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 (Unmitigated)						
20,029-Square-Foot Store	4.65	3.98	22.24	0.03	2.35	0.66
Winter Emissions (Unmitigated)						
20,029-Square-Foot Store	4.46	4.50	26.05	0.03	2.35	0.66
SMAQMD Potentially Significant Impact Threshold	65 pounds/day	65 pounds/day	—	—	—	—
Exceed SMAQMD Threshold?	No	No	—	—	—	—

Source: CalEEMod version 2013.2.2. Trip generation rates per subsection 16, Transportation/Traffic. Refer to **Appendix A** for model data outputs.

As shown in **Table 2**, Project emissions resulting from long-term operations would not exceed the SMAQMD significance criteria of 65 pounds per day of either ROG or NO_x. Therefore, operational-related air quality impacts will be considered less than significant.

- c) **Less Than Significant Impact.** Because of the region's nonattainment status for ozone and PM, the SMAQMD considers projects that are consistent with all applicable air quality plans 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 Issue a), the proposed Project would not conflict with either the Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan, PM_{2.5} State Implementation Plan, or the PM₁₀ Implementation/Maintenance Plan and Re-Designation Request for Sacramento County, since the increase in VMT attributed to the Project represents a small percentage of the estimated vehicle miles traveled in the county. As discussed in Issue b), predicted long-term operational emissions attributable to the proposed Project would not exceed SMAQMD significance thresholds. Therefore, since the Project would not conflict with applicable air quality plans or exceed SMAQMD significance thresholds, cumulative impacts would be less than significant per the SMAQMD significance threshold. The Project's contribution would not be cumulatively considerable.

- d) **Less Than Significant Impact With Mitigation Incorporated.** 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" relative to air quality issues. There are currently residential land uses to the west, east, and south of the Project site.

Air Toxics

Construction activities would involve the use of a variety of gasoline- and diesel-powered equipment that emits exhaust fumes. Sensitive receptors in the Project vicinity could be exposed to nuisance dust and heavy equipment emissions (i.e., diesel exhaust) during construction. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminant emission levels that exceed applicable standards). Construction activities would be subject to SMAQMD Rule 403, which requires taking reasonable precautions, such as using water or chemicals for control of dust during construction operations, 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 dust-related impacts during construction. Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. Nonetheless, due to the proximity to a daycare facility located south of the Project site (approximately 195 feet) and the increased sensitivity of young children, mitigation measures **AIR-1** and **AIR-2** are required. Implementation of mitigation measures **AIR-1** and **AIR-2** would reduce the amount of construction-generated pollutants by requiring the most efficient equipment.

Operation of the proposed discount retail store would not result in the development of any substantial sources of air toxics. The Project proposes a truck delivery loading dock at the south side of the store, which would result in idling delivery trucks. These trucks are a source of diesel particulate matter, an air toxic according to the California Air Pollution Control Officers Association's (2009) Health Risk Assessments for Proposed Land Use Projects. However, a loading facility accommodating fewer than 100 delivery trucks daily is not considered a potential health risk. Project truck deliveries would be substantially less than 100 per day. Therefore, the proposed Project would not expose people to substantial levels of air toxic concentrations, and this impact would be less than significant.

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 (2011) 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 carbon monoxide if:

- Traffic generated by the proposed Project would not result in deterioration of intersection level of service (LOS) to LOS E or F;² 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.

Mitigation Measures

AIR-1 The Project construction contractor shall provide a plan for approval by the SMAQMD demonstrating that the heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used in the construction of the Project, including owned, leased, and subcontractor vehicles, will achieve a Project-wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent California Air Resources Board fleet average. Acceptable options for reducing emissions may include use of late model engines (California Air Resources Board Tier 3 Certified or better³), low-emission diesel products,

² 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.

³ NO_x emissions are primarily associated with use of diesel-powered construction equipment (e.g., graders, excavators, rubber-tired dozers, tractor/loader/backhoes). The Clean Air Act of 1990 directed the EPA to study, and regulate if warranted, the contribution of off-road internal combustion engines to urban air pollution. The first federal standards (Tier 1) for new off-road diesel engines were adopted in 1994 for engines over 50 horsepower and were phased in from 1996 to 2000. In 1996, a Statement of Principles pertaining to off-road diesel engines was signed between the EPA, CARB, and engine makers (including Caterpillar, Cummins, Deere, Detroit Diesel, Deutz, Isuzu, Komatsu, Kubota, Mitsubishi, Navistar, New Holland, Wis-

alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

Timing/Implementation: Plan shall be submitted to the SMAQMD for review and approval prior to approval of improvement plans and shall be implemented during all grading and construction within the Project area

Enforcement/Monitoring: City of Elk Grove Planning Department; Sacramento Metropolitan Air Quality Management District

AIR-2

The Project construction contractor shall ensure that emissions from all off-road diesel-powered equipment used do not exceed 40 percent opacity for more than 3 minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Noncompliant equipment shall be documented and a summary provided to the City Planning Department and the SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of construction, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed and the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this measure shall supersede other SMAQMD or state rules or regulations.

Timing/Implementation: During all grading and construction within the Project area

Enforcement/Monitoring: City of Elk Grove Planning Department; Sacramento Metropolitan Air Quality Management District

- 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. 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 discount retail land use. No impact would occur.

Con, and Yanmar). On August 27, 1998, the EPA signed the final rule reflecting the provisions of the Statement of Principles. The 1998 regulation introduced Tier 1 standards for equipment under 50 horsepower and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. As a result, all off-road, diesel-fueled construction equipment manufactured in 2006 or later has been manufactured to Tier 3 standards.

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	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXISTING SETTING

A PMC biologist conducted an evaluation to characterize the biological baseline on and on lands adjacent to the proposed Project site. The evaluation involved a site visit and a thorough query of available data and literature from local, state, federal, and nongovernmental agencies.

Database searches were performed on the following websites:

- US Fish and Wildlife Service's (USFWS) Sacramento Office Species List (2014a)

- USFWS's Critical Habitat Portal (2014b)
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (2014)
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (2014)

A search of the USFWS's Critical Habitat Portal database and Sacramento Office's Species List was performed for the Project area to identify federally protected species and their habitats in the Elk Grove, California, US Geological Survey (USGS) 7.5-minute quadrangle and all adjacent quadrangles (Sloughhouse, Clay, Florin, Bruceville, Galt, Buffalo Creek, Sacramento East, and Carmichael) that may be affected by the proposed Project. In addition, a nine-quadrangle query of the CNDDDB was conducted to identify known mapped and unprocessed occurrences for special-status species within the quadrangles listed above. The CNPS database was queried to identify special-status plant species with the potential to occur in the aforementioned quadrangles. Raw data from the database queries can be found in **Appendix B**.

A PMC biologist conducted a reconnaissance-level survey on October 28, 2014. The objective of the visit was to characterize the existing biological resources conditions on the site and evaluate any potential of the occurrence of special-status species, wetlands, or other sensitive resources. The Project site has relatively flat topography with an elevation of 43 feet above mean sea level. At the time of the field survey, the western half of Project site consisted of barren, compacted soil. A single-story residence and garage are located on the eastern half of the site. Vegetation consists of unmown, weedy annual grasses and one small orange tree. Commercial retail development occurs to the north of the site. The Project site is bounded by roads to the west and south, with residential housing beyond. Single-family residences and agricultural land occur east of the Project site.

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)

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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 CNDDDB databases revealed several special-status species with the potential to occur in the Project vicinity. **Appendix B** 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.

PROJECT IMPACTS AND MITIGATION MEASURES

- a) **No Impact.** The USFWS, CNPS, and CNDDDB database queries revealed several special-status species with the potential to occur in the Project vicinity. However, due to the ground disturbance that has already occurred at the site, the urban development in the vicinity of the site, and the lack of natural habitats on or in proximity to the site, special-status species would not be expected to utilize the site (see **Appendix B**). As a result, no impact to special-status species would occur as a result of the proposed Project.
- b) **No Impact.** 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 Clean Water Act. No waters of the State or waters of the United States occur on the Project site; therefore, there would be no impact to riparian or other sensitive natural communities as a result of the proposed Project.
- c) **No Impact.** The proposed Project would not result in the loss of jurisdictional waters of the State and waters of the United States, because no waters of the State or of the United States occur on the Project site. As a result, no impact to federally protected wetlands would occur as a result of the proposed Project.
- d) **No Impact.** Implementation of the proposed Project would not interfere substantially with the movement of native resident or migratory fish or wildlife species. No established migratory routes were identified on or adjacent to the Project site. Due to the urbanized nature of the Project vicinity, including the four-lane Elk Grove Florin Road, it is unlikely that any significant wildlife corridors exist in the Project vicinity. Therefore, no impact would occur.
- e) **No Impact.** The City of Elk Grove protects all Trees of Local Importance⁴ with a single trunk of 6 inches at 4.5 feet from grade (diameter at breast height [dbh]) or larger or multiple trunks with an aggregate of 6 inches dbh or larger, through Title 19, Chapter 19.12, of the City's Municipal Code (Elk Grove 2014a). The only tree on the Project site is a small orange tree, which is not protected under the code. Therefore, no impact would occur.
- f) **No Impact.** Currently, no adopted or proposed habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans affect the proposed Project site. Therefore, no impact would occur.

⁴ Elk Grove Municipal Code Section 19.12.040 identifies the following native oak species as "trees of local importance:" coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), Oracle oak (*Quercus X moreha*), California sycamore (*Platanus racemosa*), and California black walnut (*Juglans hindsii*).

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

A cultural resources assessment was prepared for the proposed Project by Peak & Associates (2014). The reader is referred to **Appendix C** for a detailed description of the archaeological, ethnological, and historical background of the Project site and the surrounding area. The assessment prepared for the proposed Project includes a records search conducted by staff at the North Central Information Center of the California Historical Resources Information System on November 12, 2014, as well as a comprehensive field survey of the Project site conducted on November 15, 2014.

a) **No Impact.** The existing residence on the Project site is a narrow one-story structure in a Minimal Traditional style. It is wood frame on a concrete slab with a garage. The county assessor places a construction date of 1972 on the building, and this is consistent with the style and construction materials, which includes vinyl wood-grained, board-and-batten-style siding, a composite roof, and aluminum slider windows. The actual date of construction may be later, as the Elk Grove topographic map with 1979 photorevisions shows no buildings present on the site. To the east and a bit north of the residence is a newer building that is all aluminum on a concrete slab that appears to have housed a commercial venture at one time. Given the modern dates of construction, these structures do not represent historic resources. Furthermore, the records search determined that there have been no resources recorded in the Project area, and the field survey failed to identify any indications of Euro-American occupation prior to the modern day.

Elk Grove Florin Road was recorded as a site in 1993, assigned CA-SAC-545H (P-34-700). Since it is a modern roadway, that has experienced additional paving and widening beyond the original roadway, the proposed Project would not result in an impact. Therefore, there would be no impact to historic resources.

- b-d) **Less Than Significant Impact.** As described previously, the records search conducted for the Project area determined that no archaeological resources have been recorded in the Project area. In addition, the field survey failed to identify any indication of Native American occupation or use of the site. The Project site lies on a flat open plain, near a minor creek course. Campsites and villages would more likely be located near the larger, more reliable water sources such as the Cosumnes River. As a result, the Native American inhabitants of the region could have used the Project site for collecting plant foods and for hunting, but such activities leave little physical evidence. Therefore, there is a slight possibility that a site may exist and be totally obscured by vegetation, fill, or other historic activities, leaving no surface evidence. As such, the cultural resources assessment recommended that should artifacts or unusual amounts of stone, bone, or shell be uncovered during construction activities, an archeologist be consulted for an on-the-spot evaluation of the finding. If any bone is discovered that appears to be human, state law requires that the Sacramento County Coroner be contacted. If the coroner determines that the bone is human and is most likely Native American in origin, the Native American Heritage Commission must be contacted.

These recommendations are consistent with Elk Grove General Plan Policy HR-6 (Actions HR-6-Action 1 and HR-6-Action 2), which requires project proponents to halt work and immediately notify the City's Planning Division if any prehistoric, archaeological, or paleontologic artifact is uncovered during construction and to retain a qualified archaeologist to evaluate the find and recommend appropriate action. If human remains are uncovered, these actions also require the County Coroner to be notified and, if the remains are determined to be Native American, the procedures outlined in CEQA Section 15064.5(d) and (e) are to be followed. This impact would be less than significant with compliance with these existing City requirements.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

a, b) **Less Than Significant Impact With Mitigation Incorporated.** Emissions resulting from the proposed Project are presented in **Table 3**. Construction-generated greenhouse gas (GHG) emissions were amortized over the estimated life of the Project (30 years). As shown in **Table 3**, the long-term operations of the proposed Project could produce 615 metric tons of carbon dioxide equivalents (CO₂e) annually. This would contribute to a net increase in GHGs from the proposed Project.

**TABLE 3
OPERATIONAL GHG EMISSIONS – METRIC TONS PER YEAR**

Source	CO ₂ e
Construction (amortized over 30 years of Project life)	13
Area	0
Energy	86
Mobile	473
Solid Waste	39
Water	4
Total	615

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

The Elk Grove Climate Action Plan (CAP) (2013) 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 for the purpose of complying with the requirements of Assembly Bill (AB) 32 and achieving the goals of the AB 32 Scoping Plan. The City considers a specific project proposal consistent with the Elk Grove CAP if it complies with the greenhouse gas reduction measures contained in the adopted CAP.

The mandatory GHG reduction measures included in the Elk Grove Climate Action Plan that apply to commercial development are contained in **Table 4**, which also summarizes the extent to which the Project would comply with the strategies. The strategies listed in

Table 4 are required under local or state regulations and included as mitigation measures for the Project. With implementation of these strategies/measures, the Project's contribution to cumulative GHG emissions would be reduced and the Project would be consistent with the CAP.

**TABLE 4
COMPLIANCE WITH ELK GROVE CLIMATE ACTION PLAN**

Strategy	Project Compliance
<i>Built Environment Measures</i>	
BE-6 – 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 shall be required to achieve a 15 percent improvement over minimum Title 24 CALGreen energy requirements.
BE-10 – On-Site Renewable Energy Installations Third Action Item: Require new commercial, office, and industrial development to provide prewiring or conduit for solar photovoltaics.	Compliant The Project shall be required to install a solar-ready rooftop on the proposed retail store building.
<i>Resource Conservation Measures</i>	
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 shall be required to achieve a 65 percent waste diversion rate during construction activities.
<i>Transportation Alternative and Congestion Management</i>	
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 for plug-in electric vehicles.	Compliant The Project shall be required to provide an electric vehicle charging station for plug-in electric vehicles.

Table 5 provides a summary of Project GHG emissions after implementation of all of the required CAP measures. In addition to compliance with the mandatory GHG reduction measures included in the Elk Grove CAP that apply to commercial development, the proposed Project is also required to adhere to Elk Grove Municipal Code Chapters 14.10 and 23.54, which mandate low-water-use landscaping (i.e., drought-tolerant plants and drip irrigation). As shown in **Table 5**, compliance with the applicable mandatory GHG reduction measures in the CAP and the City Municipal Code would reduce emissions by 4 metric tons annually.

**TABLE 5
OPERATIONAL GHG EMISSIONS (AFTER COMPLIANCE WITH CAP) – METRIC TONS PER YEAR**

Source	CO ₂ e
Construction (amortized over 30 years of Project life)	13
Area	0
Energy	82
Mobile	473

Source	CO ₂ e
Solid Waste	39
Water	4
Total	611

Source: CalEEMod version 2013.2.2. Emissions estimates account for exceeding Tier 1 Title 24 standards consistent with the Climate Action Plan and outdoor water conservation measures consistent with Chapters 14.10 and 23.54 of the Elk Grove Municipal Code. Refer to **Appendix D** for model data outputs.

The proposed Project would comply with the GHG reduction measures included in the Elk Grove CAP that apply to commercial development (see mitigation measure **GHG-1**). As a result, the Project would be consistent with the AB 32 strategies to help California reach the emissions reduction targets. Therefore, this impact is less than significant.

Mitigation Measures

GHG-1

Prior to building permit approval, the City of Elk Grove Planning Department shall require that the Project implement the following to reduce GHG emissions, based on the referenced measures from the City's Climate Action Plan:

- a. The Project building shall achieve Tier 1 of Title 24, Part 1 green building standards to exceed minimum Title 24 energy efficiency standards by 15 percent, consistent with CAP Measure BE-6.
- b. The Project shall achieve Tier 1 of Title 24, Part 1 green building standards to required 65 percent waste diversion, consistent with CAP Measure RC-1.
- c. The Project shall include prewiring for solar photovoltaic (PV), consistent with CAP Measure BE-10. The proposed Project may also satisfy the intent of this mitigation by installing on-site solar PV systems.
- d. The Project shall provide an electric vehicle charging station for plug-in electric vehicles on-site, consistent with CAP Measure TACM-9.

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

Enforcement/Monitoring: City of Elk Grove Planning Department

99 CENTS ONLY STORE PROJECT

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

A geotechnical study was prepared for the proposed Project in June 2014 by Korbmacher Engineering, Inc., and is provided as **Appendix E** of this document.

- a) i) **No Impact.** Geologic references indicate that there no designated active or potentially active fault trace passes through the Project site. The faults nearest the Project site are the Greenville and Concord-Green Valley faults at a distance of 45 and 49 miles, respectively. Therefore, the proposed Project would not expose people or structures to potential substantial adverse effects involving rupture of a known earthquake fault. There would be no impact.

- ii) **Less Than Significant Impact.** As discussed under Issue a.i) above, the Project site is not located in the vicinity of any active faults. However, earthquake-related ground shaking can be expected during the design life of structures constructed on the site from earthquakes along active faults located outside the region, including the Greenville and Concord-Green Valley faults. Therefore, proposed structures must be designed to withstand the anticipated ground accelerations.

The State of California provides minimum standards for structural design and site development through the California Building Code (CBC) (California Code of Regulations [CCR], Title 24, Part 2). The City of Elk Grove adopted the 2013 CBC as the basis for the City Building Code (Elk Grove Municipal Code Section 16.04.010). The City's enforcement of its Building Code ensures the Project would be consistent with the CBC. All buildings constructed in the City, including the proposed Project, would be required to comply with the CBC, which includes special design requirements for building and foundation 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 the 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.

- iii) **Less Than Significant Impact.** Liquefaction is the transformation of loose saturated silts and sands with less than 15 percent clay-sized particles from a solid state to a semi-liquid state. This occurs under vibratory conditions such as those induced by a seismic event. The potential for liquefaction is dependent on soil types and density, the groundwater table, and the duration and intensity of ground shaking. Lateral spreading/lurching is a situation in which soil mass deforms laterally toward a free face, such as a stream bank, during a seismic event. The failure occurs along a liquefiable/weak subsurface layer. According to the geotechnical study prepared for the proposed Project (Korbmacher Engineering 2014, p. 4), based on a review of the soil conditions encountered, Project site soils have a low potential of soil liquefaction or lateral spreading. Therefore, this impact would be less than significant.
 - iv) **No Impact.** The Project site and surrounding properties are topographically flat; therefore, the likelihood of landslides is minimal. Furthermore, the City of Elk Grove General Plan Draft EIR confirms that there is little potential for landslides to occur anywhere in the City, as the maximum land surface slope in the City is 3 percent. Therefore, no impact associated with landslides is expected to occur.
- b) **Less Than Significant Impact.** Construction activities associated with development of the proposed Project, including land clearing, grading, and excavations, would disturb site soils, temporarily exposing them to wind and water erosion. City of Elk Grove General Plan Policy CAQ-6 states that "roads and structures shall be designed, built and landscaped so as to minimize erosion during and after construction." Procedures have been established to minimize erosion and sedimentation during construction activities in Municipal Code Chapter 16.44, Land Grading and Erosion Control. Compliance with Policy CAQ-5 and Chapter 16.44 would reduce impacts associated with soil erosion during construction and operation. Therefore, this impact would be less than significant.

- c) **Less Than Significant Impact.** See Impact a.iv) for a discussion regarding landslides. See Impact a.iii) for a discussion regarding liquefaction and lateral spreading. According to the geotechnical study prepared for the proposed Project (Korbmacher Engineering 2014, p. 4), no indications of geotechnical hazards would preclude use of the Project site for the proposed development. The geotechnical study (**Appendix E**) recommends stripping of surface soils and recompacting in accordance with accepted standards, which would ensure the proposed structure is properly designed and constructed to minimize potential risks associated with unstable soils. This impact would be less than significant.

- d) **Less Than Significant Impact.** According to the geotechnical study prepared for the proposed Project (Korbmacher Engineering 2014, p. 3), laboratory testing indicates that the site's near-surface soils have a low expansion potential. Therefore, this impact would be less than significant.

- e) **No Impact.** The proposed Project would connect to the Sacramento Regional County Sanitation District (SRCSD) and Sacramento Area Sewer District (SASD) sewer system. The Project does not propose the use or construction of septic tanks or alternative wastewater disposal systems; therefore, no impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

a-c) **Less Than Significant Impact.** Construction of the proposed Project would involve the use of limited amounts of routine hazardous materials including gasoline, diesel fuel, oils, solvents, and paints. Contractors would be required to use, store, and dispose of any hazardous materials in accordance with all applicable federal, state, and local regulations. Once operational, the proposed retail use would be expected to use, store, and transport small quantities of common hazardous materials such as paints and oil as well as pesticides, fertilizers and equipment fuel for landscaping maintenance. Employees and landscaping contractors would be required by law to use and store these materials in accordance with the product labels. Both the EPA and the US

Department of Transportation regulate the transport of hazardous waste and material, including transport via highway. Compliance with existing regulations would minimize potential risks to the public and the environment associated with the use, storage, and transport of hazardous materials associated with the proposed Project. Although a private elementary school and daycare center are located within one-quarter mile of the Project site, the proposed Project does not include any uses that would emit hazardous emissions or handle hazardous materials in a manner that would pose a risk to either facility. This impact would be less than significant.

- d) **Less Than Significant Impact.** According to a search of the Department of Toxic Substances Control EnviroStor database and the State Water Resources Control Board GeoTracker database, the Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List).⁵ In addition, no such sites are recorded within 1 mile of the Project site (DTSC 2014; SWRCB 2014). The existing residence on the Project site was constructed prior to 1980 and may have asbestos-containing materials, lead-based paint, and polychlorinated biphenyls (PCB).

Asbestos-Containing Materials

The Project would be subject to Sacramento Air Quality Management District Rule 902, Asbestos, requiring an asbestos survey and removal of any asbestos-containing materials prior to demolition.

Lead Paint

Cal/OSHA standards establish a maximum safe exposure level for types of construction work where lead exposure may occur, including demolition of structures where lead-based paint is present. Inspection, testing, and removing lead-containing building materials must be performed by State-certified contractors who are required to comply with applicable health and safety and hazardous waste regulations.

PCB

The DTSC has classified polychlorinated biphenyls as hazardous waste at certain concentrations. Electrical transformers and fluorescent light ballasts may contain PCB, and if so, they are regulated as hazardous waste. Most ballasts manufactured since 1978 do not contain PCB and are required to have a label indicating that PCB is not present. The federal Toxic Substance Control Act establishes procedures and standards for cleanup of PCB releases.

Compliance with these existing regulations would ensure that any hazardous materials present on the Project site would be handled appropriately and that no significant hazards to the public or the environment would be created. This impact would be less than significant.

⁵ Government Code Section 65962.5 requires compilation of a list of hazardous waste and substances sites to be used as a planning document by state and local agencies and developers to comply with the CEQA requirements in providing information about the location of hazardous materials release sites. This list is commonly known as the Cortese List.

- 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 safety hazard to people working in the Project area. Therefore, there would be no impact.

- g) **No Impact.** The proposed Project does not include any components that would impair implementation of 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 would be no impact.

- h) **No Impact.** The Project site is located in an urbanized area and is not at risk for wildland fire. Construction of the Project would require removal of vegetation from the site and would extend water supply and emergency access to the site, further reducing any risk of wildland fire. There would be no impact.

99 CENTS ONLY STORE PROJECT

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HYDROLOGY AND WATER QUALITY. Would the Project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

a. f) **Less Than Significant Impact.** The proposed Project could result in water quality degradation during construction and operation. Construction activities associated with development of the Project site would include grading, demolition, and vegetation removal, which would disturb and expose soils to water erosion, potentially increasing the amount of silt and debris entering drainages. In addition, refueling and parking of construction equipment and other vehicles on-site during construction could result in oil,

grease, and other related pollutant leaks and spills that could enter runoff. However, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction permitting process, which would include implementation of a stormwater pollution prevention plan (SWPPP) that includes best management practices (BMPs) to protect water quality. The Project would also be required to comply with Elk Grove Municipal Code Chapter 16.44, Land Grading and Erosion Control, which requires implementation of further measures to minimize erosion, sediment, dust, and other pollutant runoff. Examples of typical construction best management practices in SWPPPs include using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment to ensure spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw bales or plastic, to minimize the amount of uncontrolled runoff that could enter drainages and surface waters. The discharger must also install structural controls, such as sediment control, as necessary, which would constitute Best Available Technologies (BAT) to achieve compliance with water quality standards. Compliance with these requirements would ensure that site development activities do not result in the movement of unwanted material into waters on or off the Project site.

Once the Project building is occupied, runoff from the Project site would likely contain oils, grease, fuel, antifreeze, and byproducts of combustion (such as lead, cadmium, nickel, and other metals), as well as nutrients, sediments, and other pollutants. However, the Project would be required to comply with the City's NPDES Stormwater Permit requirements, which require implementation of water quality control measures. Therefore, this impact would be less than significant.

- b) **Less Than Significant Impact.** The proposed Project would be provided domestic water service by the Sacramento County Water Agency (SCWA) from water pumped from the Central Area of the South American Groundwater Subbasin. The estimated long-term annual sustainable yield of groundwater from the Central Area is 273,000 acre-feet per year. Groundwater extractions are estimated to be 235,000 acre-feet per year (excluding remediation). In addition, the SCWA, as a member of the Sacramento Groundwater Authority, actively participates in the implementation of the adopted Groundwater Management Plan, which was developed to maintain a safe and sustainable groundwater resource in the Central Area. Objectives of the Groundwater Management Plan include maintaining a long-term average extraction rate at or below the sustainable yield, maintaining groundwater elevations, and protecting against land surface subsidence.

The Project proposes the development of a retail center on 3.48 acres. Based on an annual water demand factor of 2.75 acre-feet per acre of commercial development (Elk Grove 2014b), the Project would have an annual water demand of approximately 9.6 acre-feet. This additional projected water demand would not exceed the sustainable yield of the basin or the SCWA's groundwater allocation pursuant to the Water Forum Agreement. Therefore, implementation of the proposed Project would not result in the substantial depletion of groundwater supplies, and this impact would be less than significant.

Recharge of the local aquifer system occurs primarily along active river and stream channels where extensive sand and gravel deposits exist. Although the proposed Project would result in the creation of impervious surfaces, the Project site is not located near any

river or stream channels. In addition, on-site runoff would be directed to catchment basins and allowed to infiltrate into the soil and recharge the underlying aquifer. Therefore, the proposed Project would have a less than significant impact on groundwater recharge.

- c–e) **Less Than Significant Impact.** The Project site would be regraded to direct runoff to a series of vegetated retention areas in the proposed landscape areas along the site's southern boundary. These retention areas were designed to manage on-site drainage and allow runoff to infiltrate into the underlying soils, thus preventing flooding on and off the Project site. As drainage would be retained on the site, there would be no impact on the City's existing drainage system. See Issue b) in subsection 7, Geology and Soils, and Issue a) above regarding erosion. These impacts would be less than significant.

- g, h) **No Impact.** According to the Federal Emergency Management Agency (FEMA) (2014), the Project site is designated as Zone X, Area of 0.2 Percent Annual Change of Flood Hazard (i.e., a 500-year flood hazard area). Therefore, Project implementation would not place any housing or other structures within a 100-year flood hazard area. There would be no impact.

- i) **No Impact.** The dam nearest to the Project site is Folsom Dam. The Project site is not located in the Folsom Dam Failure Flood Area. Therefore, 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, and there would be no impact.

- j) **No Impact.** The Project site is not located near any water bodies large enough to pose a risk of tsunami or seiche waves. The Project site and adjacent properties are relatively flat and not at risk of mudflow. Therefore, the proposed Project would not expose people to potential impacts involving seiche, tsunami, or mudflow. There would be no impact.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
10. LAND USE AND PLANNING. Would the Project:				
a) Physically divide an existing community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

- a) **No Impact.** The Project site would be developed as a retail center, which would be a continuation of the existing uses north of the site and would not divide an established community. There would be no impact.
- b) **Less Than Significant Impact.** The Project site is designated by the Elk Grove General Plan as Office (OF) and zoned Business and Professional Office (BP). The proposed Project includes a request for a General Plan Amendment to change the site's land use designation to Commercial (C) and a Rezone to change the site's zoning to Shopping Center (SC). The proposed land use designation and zoning would be compatible with the existing uses north of the site and would be consistent with the existing mix of commercial and residential uses in the area. The proposed General Plan Amendment and Rezone would not conflict with plans or policies adopted for the purpose of avoiding or mitigating an environmental effect or result in significant environmental impacts beyond those discussed throughout this document. Therefore, this impact would be less than significant.
- 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. Therefore, there would be no impact.

99 CENTS ONLY STORE PROJECT

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated in a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

- a, b) **No Impact.** Neither the Project site nor the adjacent properties are used for mineral extraction or are designated as important mineral recovery sites. In addition, no notices of intent to preserve mineral rights have been recorded on the Project site. No impact to mineral resources would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

a, c) **Less Than Significant Impact.** The primary source of noise associated with the proposed retail operations would be delivery truck unloading/loading activities. Noise sources associated with the typical operation of loading docks include maneuvering, loading and unloading of delivery trucks (large and small), refrigeration equipment, engine idling, and airbrakes. Idling time would be limited to no more than 5 minutes under California law (California Code of Regulations, Title 13, Section 2485). Noise levels associated with these activities have been measured at 78.3 dBA L_{eq} at a distance of 20 feet from the tractor trailer (Santee 2014). Because loading dock activities would occur in the same location, the noise source would be considered to be stationary in nature.

The City's General Plan Noise Element identifies compatible noise environments for different types of land uses. For the purposes of land use planning, the Noise Element designates noise level goals to be achieved, when feasible, for specific land uses. General Plan Policy NO-3 states that "noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table NO-A as measured immediately within the property line of lands designated for noise-sensitive uses." The noise thresholds for non-transportation noise sources (which may include

shopping centers, HVAC systems, and loading docks) is 55 Leq dB during the daytime hours (7:00 AM to 10:00 PM) and 45 Leq dB during the nighttime hours (10:00 PM to 7:00 AM).

The parcel immediately east of the Project site is currently vacant but is planned for future low-density residential development. In addition, the properties west and south of the Project site are currently developed with residential uses. As shown on **Figure 3**, the proposed building and associated loading dock and HVAC system would be located in the western portion of the Project site. As a result, the loading dock would be approximately 425 feet from the eastern property line, approximately 150 feet from the property line of the existing apartment complex to the south, and approximately 180 feet from the property line of the closest residence west of the site. Stationary noise attenuates at a rate of 6 dBA per doubling of distance, resulting in noise levels association with loading dock operations of approximately 42.3 Leq dB, which is below the nighttime standard of 45 Leq dB, at a distance of approximately 140 feet. In addition, the Project proposes a 6-foot-tall concrete masonry unit block wall along the site's eastern boundary, which would serve to further reduce noise levels on the Project site by approximately 5 dBA. Therefore, noise levels from loading dock operations would not exceed the City's exterior noise standards at any of the adjacent existing or planned residential properties. This impact would be less than significant.

- b) **Less Than Significant Impact With Mitigation Incorporated.** The Project does not include any components that would result in vibration during operation of the Project site. However, vibration could occur during construction activities. The primary construction activities associated with the Project would occur when infrastructure and the building are constructed. A vibratory compactor is the only piece of equipment likely to be used during Project construction that would be expected to exceed 0.1 inch per second peak particle velocity (ppv), which is the threshold for annoyance, and is well below the 1.0 inch per second ppv that is the threshold for structural damage. These levels are based on a reference distance of 25 feet.

The property immediately east of the site is currently vacant. The existing developments to the west and south are of sufficient distance from the Project site to not be affected by any vibrations during construction. However, the existing buildings in the retail center to the north are less than 25 feet from the proposed construction area. Pursuant to Chapter 6.32, Noise Control, of the Elk Grove Municipal Code, construction activities would be limited to the hours between 6:00 AM and 8:00 PM Monday through Friday and between 7:00 AM and 8:00 PM on Saturday and Sunday. Limiting construction activities to daytime hours would minimize annoyance at these adjacent uses. However, damage to adjacent structures could occur and this impact would be potentially significant. Implementation of mitigation measure **NOI-1** would ensure repair of any damage to adjacent structures as a result of Project construction and would reduce this impact to a less than significant level.

Mitigation Measures

- NOI-1** As part of the City's Design Review process for the proposed Project, the City shall require the following measures prior to initiation of Project construction:
- The pre-existing condition of any buildings within 25 feet of any construction activities shall be recorded in order to evaluate damage from project-related construction. Fixtures and finishes within a 25-foot radius of construction activities susceptible to damage shall be documented (photographically and in writing) prior to construction.

- Should damage occur, construction operations shall be halted and the problem activity shall be identified. A qualified engineer shall establish vibration limits based on soil conditions and the types of buildings in the immediate area. The contractor shall monitor the buildings throughout the remaining construction period and follow all recommendation of the qualified engineer to repair any damage that has occurred to the pre-existing state and to avoid any further structural damage.

Timing/Implementation: Prior to and during construction

Enforcement/Monitoring: City of Elk Grove Planning Department

- d) **Less Than Significant Impact.** Construction of the proposed Project would temporarily increase noise levels on the Project site. Activities involved in typical construction would generate maximum noise levels ranging from 85 to 95 dB at a distance of 50 feet. Noise would also be generated during the construction phase by increased truck traffic on area roadways. This noise increase would be of short duration and would likely occur primarily during daytime hours.

General Plan Policy NO-3-Action 3 requires that stationary construction equipment and construction staging areas be set back from existing noise-sensitive land uses. In addition, Municipal Code Chapter 6.32, Noise Control, exempts construction activities from the specified noise ordinance standards during the hours between 6:00 AM and 8:00 PM Monday through Friday and between 7:00 AM and 8:00 PM on Saturday and Sunday. If a construction project adheres to the construction times identified in Municipal Code Chapter 6.32, construction noise is exempted. Because construction activities on the Project site would be limited to the daytime hours and would be temporary, this impact would be less than significant.

- e, f) **No impact.** The Project site is not in an airport land use plan or within 2 miles of a public airport. Therefore, the Project site would not be exposed to excessive noise levels from either public or private airport operations. There would be no impact.

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	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

- a) **Less Than Significant Impact.** The Project proposes a retail use and would not include any residential uses that would directly increase the City's population. The proposed retail store would create a limited number of new jobs (approximately 25), which would likely be filled by local workers. Therefore, the proposed Project would not result in substantial population growth in the area. Furthermore, the Project does not include the extension of any roads or other infrastructure that has been identified as a limit to growth in the area. Therefore, this impact would be less than significant.
- b. c) **Less Than Significant Impact.** The Project site currently contains one residential unit, which would be demolished as part of the proposed Project. Therefore, implementation of the proposed Project would displace one housing unit and the associated residents. This is not considered a substantial number of existing housing or people and would not necessitate the construction of replacement housing elsewhere. These impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

- a) **Less Than Significant Impact.** The Cosumnes Community Services District (CCSD) Fire Department currently provides fire protection services to the Project site and the vicinity. As a standard condition of approval for the Project, the applicant would be required to establish an annual Mello-Roos Community Facilities District special tax to fund a portion of the cost of the District's fire and emergency services, maintenance, operation, and repair and replacement of fire station facilities and fire and emergency equipment. The CCSD operates eight fire stations serving the cities of Elk Grove and Galt, as well as areas of unincorporated Sacramento County. The nearest fire station to the Project site is Station 76 located at 8545 Sheldon Road, less than 2 miles to the southwest. The addition of a relatively small retail store to the existing retail center would not generate a significant increase in calls for fire protection services and would not trigger the need for additional fire protection facilities, the construction of which could result in impacts on the environment. Therefore, this impact would be less than significant.
- b) **Less Than Significant Impact.** The Elk Grove Police Department currently provides police protection services to the Project site. The Police Department operates primarily out of two facilities located in the City Hall complex at 8380 and 8400 Laguna Palms Way, approximately 4 miles southwest of the Project site. The addition of a relatively small retail store in an existing commercial area of the City would not result in a substantial increase in the need for police protection services or trigger the need for additional police protection facilities, the construction of which could result in impacts on the environment. Therefore, the impact would be less than significant.
- c) **Less Than Significant Impact.** The Project site is located within the boundaries of the Elk Grove Unified School District (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. As such, essentially all new development within the EGUSD boundaries contributes to the need for additional school facilities.

The proposed Project does not include any residential uses and would not directly generate any additional students who would attend EGUSD schools. The Project would create new jobs in the City, which could indirectly generate new students. However, the Project alone would not trigger the need for additional school facilities, and exceeding

school capacity is not considered 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 commercial fee in place at the time an application is submitted for a building permit, and under CEQA, payment of EGUSD development fees is considered to mitigate the need for school facilities generated by Project implementation. Therefore, anticipated impacts to schools would be less than significant.

- d) **Less Than Significant Impact.** See Issue a) in subsection 15, Recreation. The impact would be less than significant.

- e) **Less Than Significant Impact.** The proposed Project would result in a negligible increase in the City's overall population and would not be expected to generate a significant increase in demand for any other public services. This impact would be less than significant.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

- a) **Less Than Significant Impact.** The Project proposes a retail store and does not include any residential uses. As discussed in Issue a) in subsection 13, Population and Housing, the Project would not induce substantial population growth in the City and would not be expected to increase the use of existing parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Therefore, this impact would be less than significant.

- b) **Less Than Significant Impact.** The Project proposes a retail store and does not include development of any recreational facilities. As noted above, the Project would not result in substantial population growth that would increase the demand for recreational facilities. The Project would not require the construction or expansion of any recreational facilities. This impact would be less than significant.

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	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

a, b) Less Than Significant Impact

Roadway Facilities in the Project Vicinity

The Project site is currently accessed from Brown Road and is immediately east of Elk Grove Florin Road. The proposed development would be accessed from both Brown Road and Elk Grove Florin Road as well as from the existing retail center to the north. Major roadways in the Project vicinity are described below.

- **Brown Road** is a two-lane, east-west roadway that extends from Waterman Road to Elk Grove Florin Road. This roadway becomes Silverberry Avenue west of Elk Grove Florin Road.

- Calvine Road** is an east–west road extending from SR 99 to Grant Line Road. Calvine Road is six lanes from Power Inn Road to Cliffcrest Drive, transitions to four lanes from Cliffcrest Drive to Vintage Park Drive, and is five lanes between Vintage Park Drive and Elk Grove Florin Road. East of Elk Grove Florin Road, Calvine alternates between four, five, and six lanes to Vineyard Road, where it continues as a two-lane road to Grant Line Road. Calvine Road is designated as a six-lane arterial in the General Plan.
- Elk Grove Florin Road** is a north–south arterial extending from Florin Road in Sacramento County to East Stockton Boulevard (near SR 99) in south Elk Grove. Elk Grove Florin Road has four through lanes from Brittany Park Road to Elk Grove Boulevard and two lanes from Elk Grove Boulevard to East Stockton Boulevard. Elk Grove Florin Road is designated as a six-lane arterial in the General Plan from Brittany Park Road to Bond Road, as a four-lane arterial between Bond Road and Elk Grove Boulevard, and as a two-lane collector south of Elk Grove Boulevard.
- Sheldon Road** is an east–west roadway that extends from Bruceville Road to Grant Line Road. Sheldon Road is four lanes from Bruceville Road to Lewis Stein Road, six lanes from Lewis Stein Road to Power Inn Road, four lanes between Power Inn Road and Elk Grove Florin Road, and two lanes east of Elk Grove Florin Road. Sheldon Road is improved to its General Plan designation between Bruceville Road and Elk Grove Florin Road. Sheldon Road is designated as a four-lane arterial between Elk Grove Florin Road and Bradshaw Road and as a two-lane roadway with expanded right-of-way between Bruceville Road and Grant Line Road. Sheldon Road between Elk Grove Florin Road and Grant Line Road is subject to the Elk Grove Rural Road Improvement Policy.

Proposed Project

According to the Institute of Transportation Engineers (ITE) (2004) Trip Generation Handbook, the proposed Project would generate an estimated 1,145 daily trips, including 22 during the AM peak hour and 100 during the PM peak hour (see **Table 6**). It should be noted that given the Project’s location in an existing retail center, the above trip generation would be conservative, because some trips would be shared with other uses in the center. Consequently, the net new trips would be less than shown in **Table 6**.

**TABLE 6
ESTIMATED PEAK-HOUR VEHICLE TRIPS**

Land Use	Square Footage	Trip Generation Rate (per 1,000 sf)			Project Trips		
		Daily	AM Peak Hour	PM Peak Hour	Daily	AM Peak Hour	PM Peak Hour
Freestanding Discount Center ¹	20,000	57.24	1.06	5.00	1,145	22	100

Source: ITE 2004

Notes: 1. Land Use Code 815

The City of Elk Grove may recommend a traffic study for projects that generate more than 100 peak-hour trips, but the addition of 100 or fewer peak-hour trips is not considered a significant addition to overall traffic volumes on the City’s roadway system

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(Elk Grove 2000; Trinh 2014). In addition, the General Plan land use designation for the Project site is currently Office (O) and the EIR for the City of Elk Grove General Plan assumed full buildout of the Project site with office uses. The Project would not exceed the threshold for a traffic analysis and would not result in impacts to the performance of the circulation system or conflicts with applicable level of service standards. This impact would be less than significant.

- c) **No Impact.** There are no public airports in Elk Grove. Furthermore, the Project does not propose any tall structures that could interfere with aircraft operation. Therefore, no impact would occur.
- d) **No Impact.** The Project has been designed in accordance with City road and improvement standards. The proposed Project would not result in the development of any new hazards or potential incompatibilities. Therefore, the Project would have no impact associated with hazards due to roadway design features.
- e) **No Impact.** As described in Issue d) above, the Project has been designed in accordance with City road and improvement standards, thereby ensuring that adequate emergency access would be provided to the proposed uses. There would be no 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 Project includes pedestrian connections to the existing retail center to the north as well as pedestrian safety walkways within the proposed parking lot. The Project also includes bicycle parking in accordance with City standards. There would be no impact.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
17. UTILITIES AND SERVICE SYSTEMS. Would the Project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PROJECT IMPACTS AND MITIGATION MEASURES

a, b, e) **Less Than Significant Impact.** Wastewater treatment for the proposed Project would be provided by the Sacramento Area Sewer District (SASD) and the Sacramento Regional County Sanitation District (SRCSD). The SASD provides local wastewater collection and conveyance services, while the SRCSD owns and operates the regional wastewater conveyance system and the Sacramento Regional Wastewater Treatment Plant (SRWTP). The SRWTP treats an average of 150 million gallons of wastewater per day and is capable of treating up to 400 million gallons per day (mgd) during peak wet weather flow. Wastewater is treated by accelerated physical and natural biological processes before it is discharged to the Sacramento River.

Based on an average wastewater generation rate of 80 percent of water demand, the proposed Project would generate approximately 7.7 acre-feet annually or 6,856 gallons per day (0.007 mgd). This would represent 0.005 percent of the average flow to the SRWTP, which is a minor increase in total wastewater flows conveyed and treated by the SASD and the SRCSD. No new or expanded wastewater treatment infrastructure would

be required, and the wastewater treatment requirements of the Regional Water Quality Control Board would not be exceeded. This impact would be less than significant.

- d) **Less Than Significant Impact.** As discussed in Issue b) in subsection 9, Hydrology and Water Quality, the proposed Project would be provided domestic water service by the SCWA from water pumped from the Central Area of the South American Groundwater Subbasin. The estimated long-term annual sustainable yield of groundwater from the Central Area is 273,000 acre-feet per year. Groundwater extractions are estimated to be 235,000 acre-feet per year (excluding remediation). The Project proposes the development of a ±20,000-square-foot retail sales building with an annual water demand of approximately 9.6 acre-feet.

According to the SCWA's (2011) Urban Water Management Plan (UWMP), future water shortages are not projected because the agency's groundwater supply can meet demand during the dry years when minimal surface water is available and groundwater supply shortages are not expected. In addition, the SCWA has established a water shortage contingency plan corresponding to various water supply shortage stages. The water demand projections provided in the UWMP were based on the land use designations of the respective general plans within the agency's service boundaries. Although the proposed Project would change the Project site's land use designation from Office (OF) to Commercial (C), office and commercial uses have the same annual water demand factor of 2.75 acre-feet per acre (Elk Grove 2014b). Therefore, the proposed Project would not exceed the water demand projections of the Urban Water Management Plan and the SCWA would have sufficient water supplies to serve the proposed Project from existing entitlements. This impact would be less than significant.

- c) **Less Than Significant Impact.** See Issue c–e) in subsection 9, Hydrology and Water Quality. The proposed Project would require the construction of on-site drainage facilities to serve the proposed development including vegetated swales and connections to the City's existing storm drainage infrastructure. Impacts associated with construction of the planned drainage facilities are assumed as part of the Project and are addressed throughout this Initial Study. Potential impacts include disturbance of biological and/or cultural resources, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and temporary construction traffic. This impact would be less than significant.

- f, g) **Less Than Significant Impact.** The proposed Project would allow the development of a ±20,000-square-foot retail sales building, the construction and operation of which would generate solid waste and recyclable materials. Based on an average solid waste generation rate of 10.8 pounds per employee per day (Elk Grove 2014b), the proposed Project would generate an estimated 29.8 tons of solid waste per year (15 employees per shift x 10.9 lbs/employee/day = 163.5 lbs/day x 365 days/year = 59,678 lbs/yr ÷ 2,000 lbs/ton = 29.8 tons/year).

Solid waste generated by the proposed Project could be hauled by any of a number of permitted haulers as selected by the operator of the Project, and waste would be hauled to a variety of permitted landfills for disposal as selected by the chosen hauler. The selected hauler would expand its services funded by the service fees paid by the operator of the Project. The majority of the landfills serving Elk Grove waste haulers have over 70 percent remaining capacity and the combined remaining capacity of these landfills is more than 73 percent (Elk Grove 2014b). Therefore, the proposed Project would be served by a solid waste management company and landfill(s) with sufficient capacity to serve the future development. This impact would be less than significant.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

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

- a) **Less Than Significant Impact.** As discussed in subsection 4, Biological Resources, of this Initial Study, the Project as proposed would result in no impacts to biological resources. Furthermore, as discussed in the Cultural Resources subsection, the Project as proposed would not be expected to result in any impacts to cultural resources. However, should previously undiscovered cultural or paleontological resources be discovered during Project construction, implementation of Elk Grove General Plan policies would ensure such resources are properly managed. Therefore, significant adverse impacts to fish, wildlife, or plant species, including special-status species, and to examples of the major periods of California history or prehistory would not be expected. This impact would be less than significant.
- b) **Less Than Significant Impact.** The proposed Project would contribute to cumulative greenhouse gas emissions. However, the Project's contribution to this cumulative impact was determined to be less than significant. See Issue a) in subsection 6, Greenhouse Gas Emissions.

- c) **Less Than Significant Impact With Mitigation Incorporated.** The proposed Project could result in the exposure of people to construction air emissions and groundborne vibration. As discussed in the subsections addressing air quality and noise, the proposed Project would not expose a substantial number of people to toxic air emissions or excessive groundborne vibration with implementation of mitigation measures identified for the Project. Therefore, the proposed Project would not result in environmental effects that would directly or indirectly cause substantial adverse effects on human beings. Therefore, the proposed Project would not have any direct or indirect adverse impacts on humans. This impact would be less than significant.

REFERENCES

- California Air Pollution Control Officers Association. 2009. *Health Risk Assessments for Proposed Land Use Projects*.
- CARB (California Air Resources Board). 2013. State and Federal Area Designation Maps. <http://www.arb.ca.gov/desig/adm/adm.htm>.
- CDFW (California Department of Fish and Wildlife). 2014. California Natural Diversity Database QuickView Tool in BIOS 5. Sacramento: CDFW Biogeographic Data Branch. Accessed October 23. <https://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>.
- CNPS (California Native Plant Society). 2014. *Inventory of Rare and Endangered Plants* (online edition, v8-01a). Sacramento: CNPS. Accessed October 23. <http://www.rareplants.cnps.org/>.
- DOC (California Department of Conservation). 2012. Division of Land Resource Protection, Farmland Mapping and Monitoring Program. *Sacramento County Important Farmland 2010*.
- . 2013. Conservation Program Support. *Sacramento County Williamson Act FY 2011/2012*.
- DTSC (California Department of Toxic Substances Control). 2014. EnviroStor. Accessed October 14. <http://www.envirostor.dtsc.ca.gov/public/>.
- Elk Grove, City of. 2000. *Traffic Impact Analysis Guidelines*.
- . 2003a. *City of Elk Grove General Plan*.
- . 2003b. *Elk Grove General Plan Draft Environmental Impact Report* (SCH No. 2002062082).
- . 2003c. *Laguna Ridge Specific Plan Revised Draft Environmental Impact Report* (SCH No. 2000082139).
- . 2013. *City of Elk Grove Climate Action Plan*.
- . 2014a. Elk Grove Municipal Code. Accessed August 7. <http://www.codepublishing.com/CA/elkgrove/>.
- . 2014b. *Southeast Policy Area Strategic Plan Draft Environmental Impact Report* (SCH No. 2013042054).
- FEMA (Federal Emergency Management Agency). 2014. Flood Insurance Rate Map Panel #06067C0328H, effective August 16, 2012.
- ITE (Institute of Transportation Engineers). 2012. *9th Edition Trip Generation Manual*.
- Korbmacher Engineering, Inc. 2014. *Geotechnical Study, 99 Cents Only Store, NEC Elk Grove Florin Road and Brown Road, Elk Grove, California, Project No. 1428*.
- Peak & Associates, Inc. 2014. *Cultural Resources Assessment for the 99 Cents Only Store Project, City of Elk Grove, Sacramento County, California*.

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Santee, City of. 2014. *City of Santee, Santee Walmart Expansion Project Final Environmental Impact Report* (SCH No. 2011101072).

SCWA (Sacramento County Water Agency). 2006. *Central Sacramento County Groundwater Management Plan*.

———. 2011. *2010 Urban Water Management Plan*.

SMAQMD (Sacramento Metropolitan Air Quality Management District). 2008. *Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan*.

———. 2010. *PM₁₀ Implementation/Maintenance Plan and Re-Designation Request for Sacramento County*.

———. 2011. *Guide to Air Quality Assessment in Sacramento County*.
<http://www.airquality.org/ceqa/ceqaguideupdate.shtml>.

SWRCB (State Water Resources Control Board). 2014. GeoTracker. Accessed October 14.
<http://geotracker.waterboards.ca.gov/>.

Trinh, Rachel. 2014. Assistance Engineer, City of Elk Grove. Telephone conversation with Kristin Faoro, PMC environmental analyst. November 6.

USFWS (US Fish and Wildlife Service. 2014a. Sacramento Fish & Wildlife Office Species List (online edition). Sacramento: USFWS. Accessed October 23.
http://www.fws.gov/sacramento/es_species/Lists/es_species_lists-form.cfm.

———. 2014b. Critical Habitat Portal (online edition). Accessed October 23.
<http://criticalhabitat.fws.gov/crithab>.

APPENDICES

A. AIR QUALITY

99 Cent Store
Sacramento County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Free-Standing Discount Store	20.03	1000sqft	0.46	20,029.00	0
Parking Lot	109.00	Space	0.98	43,600.00	0

1.2 Other Project Characteristics

Urbanization Urban Wind Speed (m/s) 3.5 Precipitation Freq (Days) 58
 Climate Zone 6 Operational Year 2016

Utility Company Sacramento Municipal Utility District

CO2 Intensity (lb/MW/hr) 590.31 CH4 Intensity (lb/MW/hr) 0.029 N2O Intensity (lb/MW/hr) 0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - Project site = 3.48 acres total

Vehicle Trips - Trip generation per Initial Study Subsection 16

Construction Off-road Equipment Mitigation - Tier 3 engine mitigation

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	PhaseEndDate	8/18/2016	11/12/2015
tblConstructionPhase	PhaseEndDate	8/18/2016	11/12/2015
tblConstructionPhase	PhaseStartDate	11/13/2015	2/6/2015
tblConstructionPhase	PhaseStartDate	11/13/2015	2/6/2015
tblGrading	AcresOfGrading	1.50	2.48
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	ST_TR	71.07	44.68

tbVehicleTrips	SU_TR	56.36	44.68
tbVehicleTrips	WD_TR	57.24	44.68

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
2015	7.2435	39.8238	30.0076	0.0446	5.8604	2.6161	7.3280	2.9699	2.4935	4.3200	0.0000	4,287.894	4,287.894	0.9362	0.0000	4,307.555
Total	7.2435	39.8238	30.0076	0.0446	5.8604	2.6161	7.3280	2.9699	2.4935	4.3200	0.0000	4,287.894	4,287.894	0.9362	0.0000	4,307.555

Mitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
2015	4.7532	22.7708	30.5654	0.0446	5.8604	1.5151	6.2619	2.9699	1.5136	3.3713	0.0000	4,287.894	4,287.894	0.9362	0.0000	4,307.555
Total	4.7532	22.7708	30.5654	0.0446	5.8604	1.5151	6.2619	2.9699	1.5136	3.3713	0.0000	4,287.894	4,287.894	0.9362	0.0000	4,307.555

2.2 Overall Operational
Unmitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Area	1.4443	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0282	0.0282	0.0282	8.0000e-005		0.0299
Energy	3.3400e-003	0.0304	0.0255	1.8000e-004	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	36.4751	36.4751	36.4751	7.0000e-004	6.7000e-004	36.6970
Mobile	3.2077	3.9500	22.2057	0.0358	2.3036	0.0514	2.3550	0.6153	0.0472	0.6626	3.087.040	3.087.040	3.087.040	0.1397		3.089.973
Total	4.6553	3.9805	22.2448	0.0359	2.3036	0.0538	2.3574	0.6153	0.0496	0.6649	3,123.543	3,123.543	3,123.543	0.1404	6.7000e-004	3,126.700

Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Area	1.4443	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0282	0.0282	0.0282	8.0000e-005		0.0299
Energy	2.9200e-003	0.0266	0.0223	1.6000e-004	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	31.9044	31.9044	31.9044	6.1000e-004	5.8000e-004	32.0985
Mobile	3.2077	3.9500	22.2057	0.0358	2.3036	0.0514	2.3550	0.6153	0.0472	0.6626	3.087.040	3.087.040	3.087.040	0.1397		3.089.973
Total	4.6549	3.9767	22.2416	0.0359	2.3036	0.0535	2.3571	0.6153	0.0493	0.6646	3,118.973	3,118.973	3,118.973	0.1403	5.8000e-004	3,122.101

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
0.01	0.10	0.01	0.06	0.00	0.54	0.01	0.00	0.58	0.04	0.00	0.15	0.15	0.06	13.43	0.15

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/30/2015	5	2	
2	Grading	Grading	1/31/2015	2/5/2015	5	4	
3	Building Construction	Building Construction	2/6/2015	11/12/2015	5	200	
4	Paving	Paving	2/6/2015	11/12/2015	5	200	
5	Architectural Coating	Architectural Coating	2/6/2015	11/12/2015	5	200	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 2.48

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 32,006; Non-Residential Outdoor: 10,669 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	25.00	10.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment
 Clean Paved Roads

3.2 Site Preparation - 2015
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	2.5362	26.8886	17.0107	0.0171		1.4671	1.4671	1.3497	1.3497	1.3497		1,801.7440	1,801.7440	0.5379		1,813.0398
Total	2.5362	26.8886	17.0107	0.0171	5.7996	1.4671	7.2666	2.9537	1.3497	4.3034		1,801.7440	1,801.7440	0.5379		1,813.0398

3.2 Site Preparation - 2015

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0358	0.0323	0.4313	7.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166		66.3780	66.3780	3.4000e-003		66.4494
Total	0.0358	0.0323	0.4313	7.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166		66.3780	66.3780	3.4000e-003		66.4494

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	0.4158	8.3054	11.0902	0.0171	0.4010	0.4010	0.4010	0.4010	0.4010	0.4010	0.0000	1,801.744	1,801.744	0.5379		1,813.0398
Total	0.4158	8.3054	11.0902	0.0171	5.7996	0.4010	6.2006	2.9537	0.4010	3.3547	0.0000	1,801.744	1,801.744	0.5379		1,813.0398

3.2 Site Preparation - 2015
Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.0358	0.0323	0.4313	7.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	66.3780	66.3780	66.3780	3.4000e-003		66.4494
Total	0.0358	0.0323	0.4313	7.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	66.3780	66.3780	66.3780	3.4000e-003		66.4494

3.3 Grading - 2015
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Fugitive Dust					5.1741	0.0000	5.1741	2.5537	0.0000	2.5537			0.0000			0.0000
Off-Road	2.0666	21.9443	14.0902	0.0141	1.1968	1.1968	1.1968	1.1011	1.1011	1.1011	1,479,800	1,479,800	1,479,800	0.4418		1,489,077
Total	2.0666	21.9443	14.0902	0.0141	5.1741	1.1968	6.3709	2.5537	1.1011	3.6547	1,479,800	1,479,800	1,479,800	0.4418		1,489,077

3.3 Grading - 2015

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.0358	0.0323	0.4313	7.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	66.3780	66.3780	66.3780	3.4000e-003		66.4494
Total	0.0358	0.0323	0.4313	7.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	66.3780	66.3780	66.3780	3.4000e-003		66.4494

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					5.1741	0.0000	5.1741	2.5537	0.0000	2.5537			0.0000			0.0000
Off-Road	0.3416	6.8371	9.0489	0.0141	0.3308	0.3308	0.3308	0.3308	0.3308	0.3308	0.0000	1,479.8000	1,479.8000	0.4418		1,489.0774
Total	0.3416	6.8371	9.0489	0.0141	5.1741	0.3308	5.5048	2.5537	0.3308	2.8844	0.0000	1,479.8000	1,479.8000	0.4418		1,489.0774

3.3 Grading - 2015

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0358	0.0323	0.4313	7.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	66.3780	66.3780	66.3780	3.4000e-003	66.4494	66.4494
Total	0.0358	0.0323	0.4313	7.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	66.3780	66.3780	66.3780	3.4000e-003	66.4494	66.4494

3.4 Building Construction - 2015

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	3.6000	21.5642	15.0041	0.0220	1.4851	1.4851	1.4851	1.4344	1.4344	1.4344	2,055,624 ⁷	2,055,624 ⁷	2,055,624 ⁷	0.4741	0.4741	2,065,581 ²
Total	3.6000	21.5642	15.0041	0.0220	1.4851	1.4851	1.4851	1.4344	1.4344	1.4344	2,055,624⁷	2,055,624⁷	2,055,624⁷	0.4741	0.4741	2,065,581²

3.4 Building Construction - 2015
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.1441	0.9196	1.6144	2.1000e-003	0.0587	0.0157	0.0745	0.0167	0.0144	0.0312		211.3699	211.5699	1.8100e-003		211.6079
Worker	0.1118	0.1010	1.3476	2.4300e-003	0.1902	1.4700e-003	0.1916	0.0505	1.3400e-003	0.0518		207.4314	207.4314	0.0106		207.6545
Total	0.2559	1.0206	2.9620	4.5300e-003	0.2489	0.0172	0.2661	0.0672	0.0156	0.0829		419.0013	419.0013	0.0124		419.2624

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	2.1992	12.5612	15.0300	0.0220		0.8941	0.8941		0.8941	0.8941	0.0000	2,065.6247	2,055.6247	0.4741		2,065.5812
Total	2.1992	12.5612	15.0300	0.0220		0.8941	0.8941		0.8941	0.8941	0.0000	2,055.6247	2,055.6247	0.4741		2,065.5812

3.4 Building Construction - 2015
Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.1441	0.9186	1.6144	2.1000e-003	0.0687	0.0157	0.0745	0.0167	0.0144	0.0312	211.5689	211.5689	211.5689	1.8100e-003			211.6079
Worker	0.1118	0.1010	1.3476	2.4300e-003	0.1902	1.4700e-003	0.1916	0.0505	1.3400e-003	0.0518	207.4314	207.4314	207.4314	0.0106			207.6545
Total	0.2559	1.0206	2.9620	4.5300e-003	0.2489	0.0172	0.2661	0.0672	0.0158	0.0829	419.0013	419.0013	419.0013	0.0124			419.2624

3.5 Paving - 2015
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Off-Road	1.4041	14.5959	9.1695	0.0133		0.8919	0.8919		0.8215	0.8215		1,382.470 3	1,382.470 3	0.4054			1,390.982 6
Paving	0.0128					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.4169	14.5959	9.1695	0.0133		0.8919	0.8919		0.8215	0.8215		1,382.470 3	1,382.470 3	0.4054			1,390.982 6

3.5 Paving - 2015

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0525	0.7008	1.2700e-003	0.0989	7.6000e-004	0.0997	0.0262	7.0000e-004	0.0269		107.8643	107.8643	5.5200e-003		107.9803
Total	0.0582	0.0525	0.7008	1.2700e-003	0.0989	7.6000e-004	0.0997	0.0262	7.0000e-004	0.0269		107.8643	107.8643	5.5200e-003		107.9803

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	0.3146	6.5459	9.7014	0.0133		0.3818	0.3818		0.3818	0.3818	0.0000	1,382.4703	1,382.4703	0.4054		1,390.9826
Paving	0.0128					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3275	6.5459	9.7014	0.0133		0.3818	0.3818		0.3818	0.3818	0.0000	1,382.4703	1,382.4703	0.4054		1,390.9826

3.5 Paving - 2015

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0525	0.7008	1.2700e-003	0.0889	7.6000e-004	0.0897	0.0262	7.0000e-004	0.0269		107.8643	107.8643	5.5200e-003		107.9803
Total	0.0582	0.0525	0.7008	1.2700e-003	0.0889	7.6000e-004	0.0897	0.0262	7.0000e-004	0.0269		107.8643	107.8643	5.5200e-003		107.9803

3.6 Architectural Coating - 2015

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Archit. Coating	1.4835					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4066	2.5703	1.9018	2.9700e-003		0.2209	0.2209		0.2209	0.2209		281.4481	281.4481	0.0367		282.2177
Total	1.8901	2.5703	1.9018	2.9700e-003		0.2209	0.2209		0.2209	0.2209		281.4481	281.4481	0.0367		282.2177

3.6 Architectural Coating - 2015
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.0224	0.0202	0.2695	4.9000e-004	0.0380	2.9000e-004	0.0383	0.0101	2.7000e-004	0.0104	41.4863	41.4863	41.4863	2.1200e-003		41.5309
Total	0.0224	0.0202	0.2695	4.9000e-004	0.0380	2.9000e-004	0.0383	0.0101	2.7000e-004	0.0104	41.4863	41.4863	41.4863	2.1200e-003		41.5309

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Archit. Coating	1.4835					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4066	2.5703	1.9018	2.9700e-003	0.2209	0.2209	0.2209	0.2209	0.2209	0.2209	0.0000	281.4481	281.4481	0.0367		282.2177
Total	1.8901	2.5703	1.9018	2.9700e-003	0.2209	0.2209	0.2209	0.2209	0.2209	0.2209	0.0000	281.4481	281.4481	0.0367		282.2177

3.6 Architectural Coating - 2015
Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0224	0.0202	0.2695	4.9000e-004	0.0380	2.9000e-004	0.0383	0.0101	2.7000e-004	0.0104	41.4863	41.4863	41.4863	2.1200e-003		41.5309
Total	0.0224	0.0202	0.2695	4.9000e-004	0.0380	2.9000e-004	0.0383	0.0101	2.7000e-004	0.0104	41.4863	41.4863	41.4863	2.1200e-003		41.5309

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Mitigated	3.2077	3.9500	22.2057	0.0358	2.3036	0.0514	2.3550	0.6153	0.0472	0.6626	3,087,040 ⁵	3,087,040 ⁵	3,087,040 ⁵	0.1397		3,089,973 ²
Unmitigated	3.2077	3.9500	22.2057	0.0358	2.3036	0.0514	2.3550	0.6153	0.0472	0.6626	3,087,040 ⁵	3,087,040 ⁵	3,087,040 ⁵	0.1397		3,089,973 ²

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Free-Standing Discount Store	894.90	894.90	894.90	1,088,078	1,088,078
Parking Lot	0.00	0.00	0.00		
Total	894.90	894.90	894.90	1,088,078	1,088,078

4.3 Trip Type Information

Land Use	Miles						Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by	
Free-Standing Discount Store	10.00	5.00	6.50	12.20	68.80	19.00	68.80	19.00	47.5	35.5	17	
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0.00	0.00	0	0	0	

5.0 Energy Detail

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504516	0.068219	0.178179	0.147873	0.044976	0.006346	0.020386	0.015946	0.002304	0.002308	0.006193	0.000574	0.002181

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
NaturalGas Mitigated	2.9200e-003	0.0266	0.0223	1.6000e-004	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003		31.9044	31.9044	6.1000e-004	5.8000e-004	32.0985
NaturalGas Unmitigated	3.3400e-003	0.0304	0.0255	1.8000e-004	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003		36.4751	36.4751	7.0000e-004	6.7000e-004	36.6970

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																	
Free-Standing Discount Store	310.038	3.3400e-003	0.0304	0.0255	1.8000e-004	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003		36.4751	36.4751	7.0000e-004	6.7000e-004	36.6970
Parking lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.3400e-003	0.0304	0.0255	1.8000e-004	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003		36.4751	36.4751	7.0000e-004	6.7000e-004	36.6970

5.2 Energy by Land Use - Natural Gas

Mitigated

Land Use	Natural Gas Use kBTU/yr	CO2	CO	NOx	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Free-Standing Discount Store	0.271187	2.9200e-003	0.0223	0.0266	1.6000e-004	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	31.9044	31.9044	31.9044	6.1000e-004	5.8000e-004	32.0985
Total		2.9200e-003	0.0223	0.0266	1.6000e-004	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	31.9044	31.9044	31.9044	6.1000e-004	5.8000e-004	32.0985

6.0 Area Detail

6.1 Mitigation Measures Area

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Mitigated	1.4443	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0282	0.0282	8.0000e-005	8.0000e-005	0.0299	0.0299
Unmitigated	1.4443	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0282	0.0282	8.0000e-005	8.0000e-005	0.0299	0.0299

6.2 Area by SubCategory

Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Architectural Coating	0.0813				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3617				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Landscaping	1.3200e-003	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005		0.0282	0.0282	8.0000e-005		0.0299
Total	1.4443	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005		0.0282	0.0282	8.0000e-005		0.0299

Mitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Architectural Coating	0.0813				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3617				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Landscaping	1.3200e-003	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005		0.0282	0.0282	8.0000e-005		0.0299
Total	1.4443	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005		0.0282	0.0282	8.0000e-005		0.0299

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

99 Cent Store
Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Free-Standing Discount Store	20.03	1000sqft	0.46	20,029.00	0
Parking Lot	109.00	Space	0.98	43,600.00	0

1.2 Other Project Characteristics

Urbanization Urban Wind Speed (m/s) 3.5 Precipitation Freq (Days) 58
 Climate Zone 6 Operational Year 2016

Utility Company Sacramento Municipal Utility District

CO2 Intensity (lb/MW/hr) 590.31 CH4 Intensity (lb/MW/hr) 0.029 N2O Intensity (lb/MW/hr) 0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - Project site = 3.48 acres total

Vehicle Trips - Trip generation per Initial Study Subsection 16

Construction Off-road Equipment Mitigation - Tier 3 engine mitigation

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tb/ConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tbVehicleTrips	SU_TR	56.36	44.68
tbVehicleTrips	WD_TR	57.24	44.68

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
2015	7.2675	39.9329	30.4340	0.0440	5.8604	2.6164	7.3280	2.9699	2.4937	4.3200	0.0000	4,242.5857	4,242.5857	0.9363	0.0000	4,262.2470
Total	7.2675	39.9329	30.4340	0.0440	5.8604	2.6164	7.3280	2.9699	2.4937	4.3200	0.0000	4,242.5857	4,242.5857	0.9363	0.0000	4,262.2470

Mitigated Construction

Year	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
2015	4.7772	22.8800	30.9918	0.0440	5.8604	1.5153	6.2619	2.9699	1.5138	3.3713	0.0000	4,242.5857	4,242.5857	0.9363	0.0000	4,262.2470
Total	4.7772	22.8800	30.9918	0.0440	5.8604	1.5153	6.2619	2.9699	1.5138	3.3713	0.0000	4,242.5857	4,242.5857	0.9363	0.0000	4,262.2470

**2.2 Overall Operational
Unmitigated Operational**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	1.4443	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005		0.0282	0.0282	8.0000e-005		0.0299
Energy	3.3400e-003	0.0304	0.0255	1.8000e-004	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003		36.4751	36.4751	7.0000e-004	6.7000e-004	36.6970
Mobile	3.0144	4.4727	26.0158	0.0324	2.3036	0.0521	2.3557	0.6153	0.0479	0.6632		2,799.178	2,799.178	0.1398		2,802.114
Total	4.4620	4.5033	26.0548	0.0326	2.3036	0.0545	2.3581	0.6153	0.0502	0.6656		2,835.681	2,835.681	0.1406	6.7000e-004	2,838.841

Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	1.4443	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005		0.0282	0.0282	8.0000e-005		0.0299
Energy	2.9200e-003	0.0286	0.0223	1.6000e-004	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003		31.9044	31.9044	6.1000e-004	5.8000e-004	32.0985
Mobile	3.0144	4.4727	26.0158	0.0324	2.3036	0.0521	2.3557	0.6153	0.0479	0.6632		2,799.178	2,799.178	0.1398		2,802.114
Total	4.4615	4.4995	26.0516	0.0325	2.3036	0.0542	2.3578	0.6153	0.0500	0.6653		2,831.110	2,831.110	0.1405	5.8000e-004	2,834.242

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
0.01	0.08	0.01	0.06	0.00	0.53	0.01	0.00	0.58	0.04	0.00	0.16	0.16	0.06	13.43	0.16

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/30/2015	5	2	
2	Grading	Grading	1/31/2015	2/5/2015	5	4	
3	Building Construction	Building Construction	2/6/2015	11/12/2015	5	200	
4	Paving	Paving	2/6/2015	11/12/2015	5	200	
5	Architectural Coating	Architectural Coating	2/6/2015	11/12/2015	5	200	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 2.48

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 32,006; Non-Residential Outdoor: 10,669 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	25.00	10.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment
 Clean Paved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NIbio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	2.5362	26.8886	17.0107	0.0171	1.4671	1.4671	1.4671	1.3497	1.3497	1.3497		1,801.744 0	1,801.744 0	0.5379		1,813.039 B
Total	2.5362	26.8886	17.0107	0.0171	5.7996	1.4671	7.2666	2.9537	1.3497	4.3034		1,801.744 0	1,801.744 0	0.5379		1,813.039 B

3.2 Site Preparation - 2015
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0315	0.0402	0.3918	6.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	58.2893	58.2893	58.2893	3.4000e-003		58.3606
Total	0.0315	0.0402	0.3918	6.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	58.2893	58.2893	58.2893	3.4000e-003		58.3606

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	0.4158	8.3054	11.0902	0.0171		0.4010	0.4010	0.4010	0.4010	0.4010	0.0000	1,801,744	1,801,744	0.5379		1,813,039
Total	0.4158	8.3054	11.0902	0.0171	5.7996	0.4010	6.2006	2.9537	0.4010	3.3547	0.0000	1,801,744	1,801,744	0.5379		1,813,039

3.2 Site Preparation - 2015

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.0315	0.0402	0.3918	6.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	58.2893	58.2893	58.2893	3.4000e-003		58.3606
Total	0.0315	0.0402	0.3918	6.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	58.2893	58.2893	58.2893	3.4000e-003		58.3606

3.3 Grading - 2015

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					5.1741	0.0000	5.1741	2.5537	0.0000	2.5537			0.0000			0.0000
Off-Road	2.0666	21.9443	14.0902	0.0141	1.1968	1.1968	1.1968	1.1011	1.1011	1.1011	1,479.800	1,479.800	1,479.800	0.4418		1,489.077
Total	2.0666	21.9443	14.0902	0.0141	5.1741	1.1968	6.3709	2.5537	1.1011	3.6547	1,479.800	1,479.800	1,479.800	0.4418		1,489.077

3.3 Grading - 2015
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.0315	0.0402	0.3918	6.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	58.2893	58.2893	58.2893	3.4000e-003		58.3606
Total	0.0315	0.0402	0.3918	6.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166	58.2893	58.2893	58.2893	3.4000e-003		58.3606

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					5.1741	0.0000	5.1741	2.5537	0.0000	2.5537			0.0000			0.0000
Off-Road	0.3416	6.8371	9.0489	0.0141	0.3308	0.3308	0.3308	0.3308	0.3308	0.3308	0.0000	1,479,800	1,479,800	0.4418		1,489,077
Total	0.3416	6.8371	9.0489	0.0141	5.1741	0.3308	5.5048	2.5537	0.3308	2.8844	0.0000	1,479,800	1,479,800	0.4418		1,489,077

3.3 Grading - 2015

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0315	0.0402	0.3918	6.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166		58.2893	58.2893	3.4000e-003		58.3606
Total	0.0315	0.0402	0.3918	6.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166		58.2893	58.2893	3.4000e-003		58.3606

3.4 Building Construction - 2015

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	3.6000	21.5642	15.0041	0.0220	1.4851	1.4851	1.4851	1.4344	1.4344	1.4344		2,055.6247	2,055.6247	0.4741		2,065.5812
Total	3.6000	21.5642	15.0041	0.0220	1.4851	1.4851	1.4851	1.4344	1.4344	1.4344		2,055.6247	2,055.6247	0.4741		2,065.5812

3.4 Building Construction - 2015
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.1912	0.9867	2.2526	2.0900e-003	0.0387	0.0160	0.0747	0.0167	0.0147	0.0314	209.7381	209.7381	209.7381	1.8600e-003		209.7771
Worker	0.0884	0.1255	1.2245	2.1400e-003	0.1902	1.4700e-003	0.1916	0.0505	1.3400e-003	0.0518	182.1539	182.1539	182.1539	0.0106		182.3770
Total	0.2896	1.1122	3.4771	4.2300e-003	0.2489	0.0174	0.2663	0.0672	0.0160	0.0832	391.8919	391.8919	391.8919	0.0125		392.1542

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	2.1992	12.5612	15.0300	0.0220		0.8941	0.8941		0.8941	0.8941	0.0000	2,055.6247	2,055.6247	0.4741		2,065.5812
Total	2.1992	12.5612	15.0300	0.0220		0.8941	0.8941		0.8941	0.8941	0.0000	2,055.6247	2,055.6247	0.4741		2,065.5812

3.4 Building Construction - 2015

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.1912	0.9867	2.2526	2.0900e-003	0.0587	0.0160	0.0747	0.0167	0.0147	0.0314	209.7381	209.7381	209.7381	1.8600e-003		209.7771
Worker	0.0984	0.1255	1.2245	2.1400e-003	0.1902	1.4700e-003	0.1916	0.0505	1.3400e-003	0.0518	182.1539	182.1539	182.1539	0.0106		182.3770
Total	0.2896	1.1122	3.4771	4.2300e-003	0.2489	0.0174	0.2663	0.0672	0.0160	0.0832	391.8919	391.8919	391.8919	0.0125		392.1542

3.5 Paving - 2015

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	1.4041	14.5859	9.1695	0.0133		0.8919	0.8919		0.8215	0.8215		1,382.4703	1,382.4703	0.4054		1,390.9826
Paving	0.0128					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4169	14.5959	9.1695	0.0133		0.8919	0.8919		0.8215	0.8215		1,382.4703	1,382.4703	0.4054		1,390.9826

3.5 Paving - 2015
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Worker	0.0512	0.0652	0.6367	1.1100e-003	0.0989	7.6000e-004	0.0997	0.0262	7.0000e-004	0.0269	94.7200	94.7200	94.7200	5.5200e-003			94.8360
Total	0.0512	0.0652	0.6367	1.1100e-003	0.0989	7.6000e-004	0.0997	0.0262	7.0000e-004	0.0269	94.7200	94.7200	94.7200	5.5200e-003			94.8360

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Off-Road	0.3146	6.5459	9.7014	0.0133		0.3818	0.3818		0.3818	0.3818	0.0000	1,382.470 ₃	1,382.470 ₃	0.4054			1,390.982 ₆
Paving	0.0128					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.3275	6.5459	9.7014	0.0133		0.3818	0.3818		0.3818	0.3818	0.0000	1,382.470₃	1,382.470₃	0.4054			1,390.982₆

3.5 Paving - 2015

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.0512	0.0652	0.6367	1.1100e-003	0.0989	7.6000e-004	0.0997	0.0262	7.0000e-004	0.0269	94.7200	94.7200	94.7200	5.5200e-003		94.8360
Total	0.0512	0.0652	0.6367	1.1100e-003	0.0989	7.6000e-004	0.0997	0.0262	7.0000e-004	0.0269	94.7200	94.7200	94.7200	5.5200e-003		94.8360

3.6 Architectural Coating - 2015

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Archit. Coating	1.4835					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4066	2.5703	1.9018	2.9700e-003		0.2209	0.2209		0.2209	0.2209		281.4481	281.4481	0.0367		282.2177
Total	1.8901	2.5703	1.9018	2.9700e-003		0.2209	0.2209		0.2209	0.2209		281.4481	281.4481	0.0367		282.2177

**3.6 Architectural Coating - 2015
Unmitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Worker	0.0197	0.0251	0.2449	4.3000e-004	0.0380	2.9000e-004	0.0383	0.0101	2.7000e-004	0.0104	36.4308	36.4308	36.4308	2.1200e-003			36.4754
Total	0.0197	0.0251	0.2449	4.3000e-004	0.0380	2.9000e-004	0.0383	0.0101	2.7000e-004	0.0104	36.4308	36.4308	36.4308	2.1200e-003			36.4754

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Archit. Coating	1.4835					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.4066	2.5703	1.9018	2.9700e-003		0.2209	0.2209	0.2209	0.2209	0.2209	0.0000	281.4481	281.4481	0.0367			282.2177
Total	1.8901	2.5703	1.9018	2.9700e-003		0.2209	0.2209	0.2209	0.2209	0.2209	0.0000	281.4481	281.4481	0.0367			282.2177

3.6 Architectural Coating - 2015

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0197	0.0251	0.2449	4.3000e-004	0.0380	2.9000e-004	0.0383	0.0101	2.7000e-004	0.0104		36.4308	36.4308	2.1200e-003		36.4754
Total	0.0197	0.0251	0.2449	4.3000e-004	0.0380	2.9000e-004	0.0383	0.0101	2.7000e-004	0.0104		36.4308	36.4308	2.1200e-003		36.4754

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Mitigated	3.0144	4.4727	26.0158	0.0324	2.3036	0.0521	2.3557	0.6153	0.0479	0.6632		2,799.178	2,799.178	0.1398		2,802.114
Unmitigated	3.0144	4.4727	26.0158	0.0324	2.3036	0.0521	2.3557	0.6153	0.0479	0.6632		2,799.178	2,799.178	0.1398		2,802.114

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Free-Standing Discount Store	894.90	894.90	894.90	1,088,078	1,088,078
Parking Lot	0.00	0.00	0.00		
Total	894.90	894.90	894.90	1,088,078	1,088,078

4.3 Trip Type Information

Land Use	Miles				Trip %				Trip Purpose %			
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	H-O or C-NW	Primary	Diverted	Pass-by		
Free-Standing Discount Store	10.00	5.00	6.50	12.20	68.80	19.00	19.00	47.5	35.5	17		
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0.00	0	0	0		

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504516	0.068219	0.178179	0.147873	0.044976	0.006346	0.020386	0.015946	0.002304	0.002308	0.006193	0.000574	0.002181

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
NaturalGas Mitigated	2.9200e-003	0.0266	0.0223	1.6000e-004	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	31.9044	31.9044	31.9044	6.1000e-004	5.8000e-004	32.0985
NaturalGas Unmitigated	3.3400e-003	0.0304	0.0255	1.8000e-004	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	36.4751	36.4751	36.4751	7.0000e-004	6.7000e-004	36.6970

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																	
Free-Standing Discount Store	310.038	3.3400e-003	0.0304	0.0255	1.8000e-004	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	36.4751	36.4751	36.4751	7.0000e-004	6.7000e-004	36.6970
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.3400e-003	0.0304	0.0255	1.8000e-004	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	2.3100e-003	36.4751	36.4751	36.4751	7.0000e-004	6.7000e-004	36.6970

5.2 Energy by Land Use - NaturalGas

Mitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Free-Standing Discount Store	0.271187	2.9200e-003	0.0266	0.0223	1.6000e-004	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	31.9044	31.9044	31.9044	6.1000e-004	5.8000e-004	32.0985
Total		2.9200e-003	0.0266	0.0223	1.6000e-004	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	2.0200e-003	31.9044	31.9044	31.9044	6.1000e-004	5.8000e-004	32.0985

6.0 Area Detail

6.1 Mitigation Measures Area

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Mitigated	1.4443	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0282	0.0282	0.0282	8.0000e-005	0.0299	0.0299
Unmitigated	1.4443	1.3000e-004	0.0135	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0282	0.0282	0.0282	8.0000e-005	0.0299	0.0299

6.2 Area by SubCategory

Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Architectural Coating	0.0813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3200e-003	1.3000e-004	0.0135	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	8.0000e-005		0.0299
Total	1.4443	1.3000e-004	0.0135	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	8.0000e-005		0.0299

Mitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Architectural Coating	0.0813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3200e-003	1.3000e-004	0.0135	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	8.0000e-005		0.0299
Total	1.4443	1.3000e-004	0.0135	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	8.0000e-005		0.0299

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

B. BIOLOGY

CNDDDB 9-Quad Species List 274 records.

Element Type	Scientific Name	Common Name	Element Code	Federal Status	State Status	CDFW Status	CA Rare Plant Rank	Quad Code	Quad Name	Data Status	Taxonomic Sort
Animals - Amphibians	Ambystoma californiense	California tiger salamander	AAAAA01180	Threatened	Threatened	SSC	-	3812132	Clay	Mapped and Unprocessed	Animals - Amphibians - Ambystomatidae - Ambystoma californiense
Animals - Amphibians	Ambystoma californiense	California tiger salamander	AAAAA01180	Threatened	Threatened	SSC	-	3812133	Galt	Mapped	Animals - Amphibians - Ambystomatidae - Ambystoma californiense
Animals - Amphibians	Ambystoma californiense	California tiger salamander	AAAAA01180	Threatened	Threatened	SSC	-	3812142	Sloughhouse	Unprocessed	Animals - Amphibians - Ambystomatidae - Ambystoma californiense
Animals - Amphibians	Spea hammondii	western spadefoot	AAABF02020	None	None	SSC	-	3812142	Sloughhouse	Mapped	Animals - Amphibians - Scaphiopodidae - Spea hammondii
Animals - Amphibians	Spea hammondii	western spadefoot	AAABF02020	None	None	SSC	-	3812152	Buffalo Creek	Mapped	Animals - Amphibians - Scaphiopodidae - Spea hammondii
Animals - Amphibians	Spea hammondii	western spadefoot	AAABF02020	None	None	SSC	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Amphibians - Scaphiopodidae - Spea hammondii
Animals - Birds	Accipiter cooperii	Cooper's hawk	ABNKC12040	None	None	WL	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter cooperii	Cooper's hawk	ABNKC12040	None	None	WL	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter cooperii	Cooper's hawk	ABNKC12040	None	None	WL	-	3812154	Sacramento East	Mapped	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter cooperii	Cooper's hawk	ABNKC12040	None	None	WL	-	3812143	Elk Grove	Mapped	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter cooperii	Cooper's hawk	ABNKC12040	None	None	WL	-	3812144	Florin	Mapped	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Aquila chrysaetos	golden eagle	ABNKC22010	None	None	FP WL	-	3812152	Buffalo Creek	Unprocessed	Animals - Birds - Accipitridae - Aquila chrysaetos
Animals - Birds	Aquila chrysaetos	golden eagle	ABNKC22010	None	None	FP WL	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Birds - Accipitridae - Aquila chrysaetos
Animals - Birds	Buteo regalis	ferruginous hawk	ABNKC19120	None	None	WL	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo regalis
Animals - Birds	Buteo regalis	ferruginous hawk	ABNKC19120	None	None	WL	-	3812152	Buffalo Creek	Unprocessed	Animals - Birds - Accipitridae - Buteo regalis
Animals - Birds	Buteo regalis	ferruginous hawk	ABNKC19120	None	None	WL	-	3812144	Florin	Mapped	Animals - Birds - Accipitridae - Buteo regalis
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812144	Florin	Mapped	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812143	Elk Grove	Mapped	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812142	Sloughhouse	Mapped	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812132	Clay	Mapped	Animals - Birds - Accipitridae - Buteo swainsoni

Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812133	Galt	Mapped	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812134	Bruceville	Mapped	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812154	Sacramento East	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Circus cyaneus	northern harrier	ABNKC11010	None	None	SSC	-	3812153	Carmichael	Unprocessed	Animals - Birds - Accipitridae - Circus cyaneus
Animals - Birds	Circus cyaneus	northern harrier	ABNKC11010	None	None	SSC	-	3812152	Buffalo Creek	Unprocessed	Animals - Birds - Accipitridae - Circus cyaneus
Animals - Birds	Circus cyaneus	northern harrier	ABNKC11010	None	None	SSC	-	3812142	Sloughhouse	Unprocessed	Animals - Birds - Accipitridae - Circus cyaneus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812143	Elk Grove	Mapped	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812142	Sloughhouse	Mapped	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812144	Florin	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812134	Bruceville	Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812133	Galt	Mapped	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812154	Sacramento East	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812154	Sacramento East	Unprocessed	Animals - Birds - Accipitridae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812153	Carmichael	Unprocessed	Animals - Birds - Accipitridae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812134	Bruceville	Unprocessed	Animals - Birds - Accipitridae - Pandion haliaetus
Animals - Birds	Chaetura vauxi	Vaux's swift	ABNUA03020	None	None	SSC	-	3812153	Carmichael	Unprocessed	Animals - Birds - Apodidae - Chaetura vauxi
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812134	Bruceville	Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812133	Galt	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812144	Florin	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea alba

Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812144	Florin	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812133	Galt	Mapped	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812134	Bruceville	Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812154	Sacramento East	Mapped	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Botaurus lentiginosus	American bittern	ABNGA01020	None	None	-	-	3812144	Florin	Unprocessed	Animals - Birds - Ardeidae - Botaurus lentiginosus
Animals - Birds	Egretta thula	snowy egret	ABNGA06030	None	None	-	-	3812144	Florin	Unprocessed	Animals - Birds - Ardeidae - Egretta thula
Animals - Birds	Egretta thula	snowy egret	ABNGA06030	None	None	-	-	3812134	Bruceville	Unprocessed	Animals - Birds - Ardeidae - Egretta thula
Animals - Birds	Ixobrychus exilis	least bittern	ABNGA02010	None	None	SSC	-	3812144	Florin	Unprocessed	Animals - Birds - Ardeidae - Ixobrychus exilis
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	3812144	Florin	Mapped and Unprocessed	Animals - Birds - Ardeidae - Nycticorax nycticorax
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	3812133	Galt	Mapped	Animals - Birds - Ardeidae - Nycticorax nycticorax
Animals - Birds	Cardinalis cardinalis	northern cardinal	ABPBX60010	None	None	WL	-	3812133	Galt	Unprocessed	Animals - Birds - Cardinalidae - Cardinalis cardinalis
Animals - Birds	Pica nuttalli	yellow-billed magpie	ABPAV09020	None	None	-	-	3812154	Sacramento East	Unprocessed	Animals - Birds - Corvidae - Pica nuttalli
Animals - Birds	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	Proposed Threatened	Endangered	-	-	3812134	Bruceville	Unprocessed	Animals - Birds - Cuculidae - Coccyzus americanus occidentalis
Animals - Birds	Ammodramus savannarum	grasshopper sparrow	ABPBXA0020	None	None	SSC	-	3812134	Bruceville	Unprocessed	Animals - Birds - Emberizidae - Ammodramus savannarum
Animals - Birds	Ammodramus savannarum	grasshopper sparrow	ABPBXA0020	None	None	SSC	-	3812154	Sacramento East	Unprocessed	Animals - Birds - Emberizidae - Ammodramus savannarum
Animals - Birds	Ammodramus savannarum	grasshopper sparrow	ABPBXA0020	None	None	SSC	-	3812144	Florin	Unprocessed	Animals - Birds - Emberizidae - Ammodramus savannarum
Animals - Birds	Chondestes grammacus	lark sparrow	ABPBX96010	None	None	-	-	3812154	Sacramento East	Unprocessed	Animals - Birds - Emberizidae - Chondestes grammacus
Animals - Birds	Melospiza melodia	song sparrow (-inModesto-in population)	ABPBXA3010	None	None	SSC	-	3812154	Sacramento East	Mapped	Animals - Birds - Emberizidae - Melospiza melodia
Animals - Birds	Melospiza melodia	song sparrow (-inModesto-in population)	ABPBXA3010	None	None	SSC	-	3812144	Florin	Mapped	Animals - Birds - Emberizidae - Melospiza melodia
Animals - Birds	Melospiza melodia	song sparrow (-inModesto-in population)	ABPBXA3010	None	None	SSC	-	3812134	Bruceville	Mapped	Animals - Birds - Emberizidae - Melospiza melodia

Animals - Birds	Spizella breweri	Brewer's sparrow	ABPBX94040	None	None	-	-	3812154	Sacramento East	Unprocessed	Animals - Birds - Emberizidae - Spizella breweri
Animals - Birds	Falco columbarius	merlin	ABNKD06030	None	None	WL	-	3812152	Buffalo Creek	Unprocessed	Animals - Birds - Falconidae - Falco columbarius
Animals - Birds	Falco columbarius	merlin	ABNKD06030	None	None	WL	-	3812144	Florin	Mapped	Animals - Birds - Falconidae - Falco columbarius
Animals - Birds	Falco mexicanus	prairie falcon	ABNKD06090	None	None	WL	-	3812154	Sacramento East	Unprocessed	Animals - Birds - Falconidae - Falco mexicanus
Animals - Birds	Spinus lawrencei	Lawrence's goldfinch	ABPBY06100	None	None	-	-	3812152	Buffalo Creek	Unprocessed	Animals - Birds - Fringillidae - Spinus lawrencei
Animals - Birds	Grus canadensis canadensis	lesser sandhill crane	ABNMK01011	None	None	SSC	-	3812134	Bruceville	Unprocessed	Animals - Birds - Gruidae - Grus canadensis canadensis
Animals - Birds	Grus canadensis tabida	greater sandhill crane	ABNMK01014	None	Threatened	FP	-	3812134	Bruceville	Unprocessed	Animals - Birds - Gruidae - Grus canadensis tabida
Animals - Birds	Grus canadensis tabida	greater sandhill crane	ABNMK01014	None	Threatened	FP	-	3812144	Florin	Unprocessed	Animals - Birds - Gruidae - Grus canadensis tabida
Animals - Birds	Progne subis	purple martin	ABPAU01010	None	None	SSC	-	3812154	Sacramento East	Mapped and Unprocessed	Animals - Birds - Hirundinidae - Progne subis
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812154	Sacramento East	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812153	Carmichael	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812142	Sloughhouse	Mapped and Unprocessed	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	None	SSC	-	3812142	Sloughhouse	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	None	SSC	-	3812143	Elk Grove	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	None	SSC	-	3812134	Bruceville	Mapped and Unprocessed	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	None	SSC	-	3812133	Galt	Mapped and Unprocessed	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	None	SSC	-	3812132	Clay	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	None	SSC	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	None	SSC	-	3812144	Florin	Mapped and Unprocessed	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	None	SSC	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Xanthocephalus xanthocephalus	yellow-headed blackbird	ABPBXB3010	None	None	SSC	-	3812144	Florin	Mapped	Animals - Birds - Icteridae - Xanthocephalus xanthocephalus
Animals - Birds	Lanius ludovicianus	loggerhead shrike	ABPBR01030	None	None	SSC	-	3812144	Florin	Unprocessed	Animals - Birds - Laniidae - Lanius ludovicianus
Animals - Birds	Lanius ludovicianus	loggerhead shrike	ABPBR01030	None	None	SSC	-	3812153	Carmichael	Unprocessed	Animals - Birds - Laniidae - Lanius ludovicianus
Animals - Birds	Lanius ludovicianus	loggerhead shrike	ABPBR01030	None	None	SSC	-	3812152	Buffalo Creek	Unprocessed	Animals - Birds - Laniidae - Lanius ludovicianus

Animals - Birds	Lanius ludovicianus	loggerhead shrike	ABPBR01030	None	None	SSC	-	3812134	Bruceville	Unprocessed	Animals - Birds - Laniidae - Lanius ludovicianus
Animals - Birds	Sternula antillarum browni	California least tern	ABNNM08103	Endangered	Endangered	FP	-	3812144	Florin	Unprocessed	Animals - Birds - Laniidae - Sternula antillarum browni
Animals - Birds	Baeolophus inornatus	oak titmouse	ABPAW01100	None	None	-	-	3812144	Florin	Unprocessed	Animals - Birds - Paridae - Baeolophus inornatus
Animals - Birds	Setophaga occidentalis	hermit warbler	ABPBX03090	None	None	-	-	3812133	Galt	Unprocessed	Animals - Birds - Parulidae - Setophaga occidentalis
Animals - Birds	Phalacrocorax auritus	double-crested cormorant	ABNFD01020	None	None	WL	-	3812134	Bruceville	Unprocessed	Animals - Birds - Phalacrocoracidae - Phalacrocorax auritus
Animals - Birds	Phalacrocorax auritus	double-crested cormorant	ABNFD01020	None	None	WL	-	3812144	Florin	Mapped and Unprocessed	Animals - Birds - Phalacrocoracidae - Phalacrocorax auritus
Animals - Birds	Picoides nuttallii	Nuttall's woodpecker	ABNYF07020	None	None	-	-	3812144	Florin	Unprocessed	Animals - Birds - Picidae - Picoides nuttallii
Animals - Birds	Picoides nuttallii	Nuttall's woodpecker	ABNYF07020	None	None	-	-	3812152	Buffalo Creek	Unprocessed	Animals - Birds - Picidae - Picoides nuttallii
Animals - Birds	Picoides nuttallii	Nuttall's woodpecker	ABNYF07020	None	None	-	-	3812153	Carmichael	Unprocessed	Animals - Birds - Picidae - Picoides nuttallii
Animals - Birds	Athene cucularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cucularia
Animals - Birds	Athene cucularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cucularia
Animals - Birds	Athene cucularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812154	Sacramento East	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cucularia
Animals - Birds	Athene cucularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812144	Florin	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cucularia
Animals - Birds	Athene cucularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812143	Elk Grove	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cucularia
Animals - Birds	Athene cucularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812142	Sloughhouse	Unprocessed	Animals - Birds - Strigidae - Athene cucularia
Animals - Birds	Athene cucularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812133	Galt	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cucularia
Animals - Birds	Athene cucularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812132	Clay	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cucularia
Animals - Birds	Athene cucularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812134	Bruceville	Mapped and Unprocessed	Animals - Birds - Strigidae - Athene cucularia
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812134	Bruceville	Mapped	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812132	Clay	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812133	Galt	Mapped	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi

Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812142	Sloughhouse	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812143	Elk Grove	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812154	Sacramento East	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812144	Florin	Mapped	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta lynchi
Animals - Crustaceans	Branchinecta mesovallensis	midvalley fairy shrimp	ICBRA03150	None	None	-	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta mesovallensis
Animals - Crustaceans	Branchinecta mesovallensis	midvalley fairy shrimp	ICBRA03150	None	None	-	-	3812144	Florin	Mapped	Animals - Crustaceans - Branchinectidae - Branchinecta mesovallensis
Animals - Crustaceans	Branchinecta mesovallensis	midvalley fairy shrimp	ICBRA03150	None	None	-	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta mesovallensis
Animals - Crustaceans	Branchinecta mesovallensis	midvalley fairy shrimp	ICBRA03150	None	None	-	-	3812143	Elk Grove	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta mesovallensis
Animals - Crustaceans	Branchinecta mesovallensis	midvalley fairy shrimp	ICBRA03150	None	None	-	-	3812142	Sloughhouse	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta mesovallensis
Animals - Crustaceans	Branchinecta mesovallensis	midvalley fairy shrimp	ICBRA03150	None	None	-	-	3812133	Galt	Mapped	Animals - Crustaceans - Branchinectidae - Branchinecta mesovallensis
Animals - Crustaceans	Branchinecta mesovallensis	midvalley fairy shrimp	ICBRA03150	None	None	-	-	3812132	Clay	Mapped and Unprocessed	Animals - Crustaceans - Branchinectidae - Branchinecta mesovallensis
Animals - Crustaceans	Dumontia oregonensis	hairy water flea	ICBRA23010	None	None	-	-	3812153	Carmichael	Mapped	Animals - Crustaceans - Dumontiidae - Dumontia oregonensis
Animals - Crustaceans	Dumontia oregonensis	hairy water flea	ICBRA23010	None	None	-	-	3812152	Buffalo Creek	Mapped	Animals - Crustaceans - Dumontiidae - Dumontia oregonensis

Animals - Crustaceans	Linderiella occidentalis	California Linderiella	ICBRA06010	None	None	-	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Crustaceans - Linderiellidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California Linderiella	ICBRA06010	None	None	-	-	3812144	Florin	Mapped and Unprocessed	Animals - Crustaceans - Linderiellidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California Linderiella	ICBRA06010	None	None	-	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Crustaceans - Linderiellidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California Linderiella	ICBRA06010	None	None	-	-	3812154	Sacramento East	Mapped and Unprocessed	Animals - Crustaceans - Linderiellidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California Linderiella	ICBRA06010	None	None	-	-	3812132	Clay	Mapped and Unprocessed	Animals - Crustaceans - Linderiellidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California Linderiella	ICBRA06010	None	None	-	-	3812133	Galt	Mapped	Animals - Crustaceans - Linderiellidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California Linderiella	ICBRA06010	None	None	-	-	3812134	Bruceville	Mapped	Animals - Crustaceans - Linderiellidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California Linderiella	ICBRA06010	None	None	-	-	3812142	Sloughhouse	Mapped and Unprocessed	Animals - Crustaceans - Linderiellidae - Linderiella occidentalis
Animals - Crustaceans	Linderiella occidentalis	California Linderiella	ICBRA06010	None	None	-	-	3812143	Elk Grove	Mapped and Unprocessed	Animals - Crustaceans - Linderiellidae - Linderiella occidentalis
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812143	Elk Grove	Mapped and Unprocessed	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812142	Sloughhouse	Mapped and Unprocessed	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812134	Bruceville	Mapped	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812133	Galt	Mapped	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812132	Clay	Mapped and Unprocessed	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812154	Sacramento East	Mapped and Unprocessed	Animals - Crustaceans - Triopsidae - Lepidurus packardii

Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812144	Florin	Mapped and Unprocessed	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Crustaceans	Lepidurus packardii	vernal pool tadpole shrimp	ICBRA10010	Endangered	None	-	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Crustaceans - Triopsidae - Lepidurus packardii
Animals - Fish	Lavinia exilicauda exilicauda	Central Valley hitch	AFCJB19012	None	None	-	-	3812134	Bruceville	Unprocessed	Animals - Fish - Cyprinidae - Lavinia exilicauda exilicauda
Animals - Fish	Mylopharodon conocephalus	hardhead	AFCJB25010	None	None	SSC	-	3812154	Sacramento East	Unprocessed	Animals - Fish - Cyprinidae - Mylopharodon conocephalus
Animals - Fish	Pogonichthys macrolepidotus	Sacramento splittail	AFCJB34020	None	None	SSC	-	3812154	Sacramento East	Unprocessed	Animals - Fish - Cyprinidae - Pogonichthys macrolepidotus
Animals - Fish	Pogonichthys macrolepidotus	Sacramento splittail	AFCJB34020	None	None	SSC	-	3812144	Florin	Mapped	Animals - Fish - Cyprinidae - Pogonichthys macrolepidotus
Animals - Fish	Pogonichthys macrolepidotus	Sacramento splittail	AFCJB34020	None	None	SSC	-	3812134	Bruceville	Unprocessed	Animals - Fish - Cyprinidae - Pogonichthys macrolepidotus
Animals - Fish	Hysterothorax traski traski	Sacramento-San Joaquin tule perch	AFCQK02012	None	None	-	-	3812134	Bruceville	Unprocessed	Animals - Fish - Embiotocidae - Hysterothorax traski traski
Animals - Fish	Hysterothorax traski traski	Sacramento-San Joaquin tule perch	AFCQK02012	None	None	-	-	3812154	Sacramento East	Unprocessed	Animals - Fish - Embiotocidae - Hysterothorax traski traski
Animals - Fish	Hypomesus transpacificus	Delta smelt	AFCHB01040	Threatened	Endangered	-	-	3812154	Sacramento East	Unprocessed	Animals - Fish - Osmeridae - Hypomesus transpacificus
Animals - Fish	Hypomesus transpacificus	Delta smelt	AFCHB01040	Threatened	Endangered	-	-	3812134	Bruceville	Unprocessed	Animals - Fish - Osmeridae - Hypomesus transpacificus
Animals - Fish	Spinichthys thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	SSC	-	3812144	Florin	Mapped	Animals - Fish - Osmeridae - Spinichthys thaleichthys
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	-	-	3812154	Sacramento East	Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	-	-	3812134	Bruceville	Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Lampetra ayresii	river lamprey	AFBAA02030	None	None	SSC	-	3812154	Sacramento East	Unprocessed	Animals - Fish - Petromyzontidae - Lampetra ayresii
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812153	Carmichael	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - central California coast DPS	AFCHA0209G	Threatened	None	-	-	3812154	Sacramento East	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus

Animals - Fish	Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812154	Sacramento East	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812144	Florin	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812133	Galt	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812134	Bruceville	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812142	Sloughhouse	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812143	Elk Grove	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus tshawytscha	chinook salmon - Central Valley fall / late fall-run ESU	AFCHA0205N	None	None	SSC	-	3812134	Bruceville	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha
Animals - Fish	Oncorhynchus tshawytscha	chinook salmon - Central Valley spring-run ESU	AFCHA0205A	Threatened	Threatened	-	-	3812154	Sacramento East	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha
Animals - Fish	Oncorhynchus tshawytscha	chinook salmon - Sacramento River winter-run ESU	AFCHA0205B	Endangered	Endangered	-	-	3812154	Sacramento East	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha
Animals - Fish	Oncorhynchus tshawytscha	chinook salmon - Central Valley fall / late fall-run ESU	AFCHA0205N	None	None	SSC	-	3812154	Sacramento East	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha
Animals - Insects	Andrena blennospermatis	Blennosperma vernal pool andrenid bee	IHYM35030	None	None	-	-	3812142	Sloughhouse	Mapped	Animals - Insects - Andrenidae - Andrena blennospermatis
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812142	Sloughhouse	Mapped	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812143	Elk Grove	Mapped	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812134	Bruceville	Mapped	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812133	Galt	Mapped	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812153	Carmichael	Mapped and Unprocessed	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812154	Sacramento East	Mapped and Unprocessed	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus

Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	IICOL48011	Threatened	None	-	-	3812152	Buffalo Creek	Mapped	Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus
Animals - Insects	Hydrochara rickseckeri	Ricksecker's water scavenger beetle	IICOL5V010	None	None	-	-	3812152	Buffalo Creek	Mapped	Animals - Insects - Hydrophilidae - Hydrochara rickseckeri
Animals - Insects	Hydrochara rickseckeri	Ricksecker's water scavenger beetle	IICOL5V010	None	None	-	-	3812153	Carmichael	Mapped	Animals - Insects - Hydrophilidae - Hydrochara rickseckeri
Animals - Insects	Hydrochara rickseckeri	Ricksecker's water scavenger beetle	IICOL5V010	None	None	-	-	3812134	Bruceville	Mapped	Animals - Insects - Hydrophilidae - Hydrochara rickseckeri
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812134	Bruceville	Mapped	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812153	Carmichael	Mapped	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812154	Sacramento East	Mapped	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812144	Florin	Mapped and Unprocessed	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Lasiurus blossevillei	western red bat	AMACC05060	None	None	SSC	-	3812144	Florin	Unprocessed	Animals - Mammals - Vespertilionidae - Lasiurus blossevillei
Animals - Mammals	Lasiurus cinereus	hoary bat	AMACC05030	None	None	-	-	3812144	Florin	Unprocessed	Animals - Mammals - Vespertilionidae - Lasiurus cinereus
Animals - Mammals	Lasiurus cinereus	hoary bat	AMACC05030	None	None	-	-	3812134	Bruceville	Unprocessed	Animals - Mammals - Vespertilionidae - Lasiurus cinereus
Animals - Mammals	Myotis ciliolabrum	western small-footed myotis	AMACC01140	None	None	-	-	3812134	Bruceville	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis ciliolabrum
Animals - Mammals	Myotis lucifugus	little brown bat	AMACC01010	None	None	-	-	3812134	Bruceville	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis lucifugus
Animals - Mammals	Myotis lucifugus	little brown bat	AMACC01010	None	None	-	-	3812144	Florin	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis lucifugus
Animals - Mammals	Myotis yumanensis	Yuma myotis	AMACC01020	None	None	-	-	3812144	Florin	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis yumanensis
Animals - Mammals	Myotis yumanensis	Yuma myotis	AMACC01020	None	None	-	-	3812134	Bruceville	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis yumanensis
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812133	Galt	Mapped	Animals - Reptiles - Emydidae - Emys marmorata

Animals - Reptiles	<i>Emys marmorata</i>	western pond turtle	ARAAD02030	None	None	SSC	-	3812132	Clay	Mapped and Unprocessed	Animals - Reptiles - Emydidae - <i>Emys marmorata</i>
Animals - Reptiles	<i>Emys marmorata</i>	western pond turtle	ARAAD02030	None	None	SSC	-	3812134	Bruceville	Mapped	Animals - Reptiles - Emydidae - <i>Emys marmorata</i>
Animals - Reptiles	<i>Emys marmorata</i>	western pond turtle	ARAAD02030	None	None	SSC	-	3812142	Sloughhouse	Mapped	Animals - Reptiles - Emydidae - <i>Emys marmorata</i>
Animals - Reptiles	<i>Emys marmorata</i>	western pond turtle	ARAAD02030	None	None	SSC	-	3812143	Elk Grove	Mapped	Animals - Reptiles - Emydidae - <i>Emys marmorata</i>
Animals - Reptiles	<i>Emys marmorata</i>	western pond turtle	ARAAD02030	None	None	SSC	-	3812144	Florin	Mapped	Animals - Reptiles - Emydidae - <i>Emys marmorata</i>
Animals - Reptiles	<i>Emys marmorata</i>	western pond turtle	ARAAD02030	None	None	SSC	-	3812152	Buffalo Creek	Mapped and Unprocessed	Animals - Reptiles - Emydidae - <i>Emys marmorata</i>
Animals - Reptiles	<i>Emys marmorata</i>	western pond turtle	ARAAD02030	None	None	SSC	-	3812154	Sacramento East	Unprocessed	Animals - Reptiles - Emydidae - <i>Emys marmorata</i>
Animals - Reptiles	<i>Emys marmorata</i>	western pond turtle	ARAAD02030	None	None	SSC	-	3812153	Carmichael	Mapped	Animals - Reptiles - Emydidae - <i>Emys marmorata</i>
Animals - Reptiles	<i>Thamnophis gigas</i>	giant garter snake	ARADB36150	Threatened	Threatened	-	-	3812144	Florin	Mapped	Animals - Reptiles - Natricidae - <i>Thamnophis gigas</i>
Animals - Reptiles	<i>Thamnophis gigas</i>	giant garter snake	ARADB36150	Threatened	Threatened	-	-	3812143	Elk Grove	Mapped	Animals - Reptiles - Natricidae - <i>Thamnophis gigas</i>
Animals - Reptiles	<i>Thamnophis gigas</i>	giant garter snake	ARADB36150	Threatened	Threatened	-	-	3812134	Bruceville	Mapped	Animals - Reptiles - Natricidae - <i>Thamnophis gigas</i>
Animals - Reptiles	<i>Thamnophis gigas</i>	giant garter snake	ARADB36150	Threatened	Threatened	-	-	3812132	Clay	Mapped	Animals - Reptiles - Natricidae - <i>Thamnophis gigas</i>
Animals - Reptiles	<i>Thamnophis gigas</i>	giant garter snake	ARADB36150	Threatened	Threatened	-	-	3812133	Galt	Mapped	Animals - Reptiles - Natricidae - <i>Thamnophis gigas</i>
Community - Terrestrial	Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	-	-	3812134	Bruceville	Mapped	Community - Terrestrial - Coastal and Valley Freshwater Marsh
Community - Terrestrial	Elderberry Savanna	Elderberry Savanna	CTT63440CA	None	None	-	-	3812154	Sacramento East	Mapped	Community - Terrestrial - Elderberry Savanna
Community - Terrestrial	Great Valley Mixed Riparian Forest	Great Valley Mixed Riparian Forest	CTT61420CA	None	None	-	-	3812134	Bruceville	Mapped	Community - Terrestrial - Great Valley Mixed Riparian Forest
Community - Terrestrial	Great Valley Valley Oak Riparian Forest	Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	-	-	3812134	Bruceville	Mapped	Community - Terrestrial - Great Valley Valley Oak Riparian Forest
Community - Terrestrial	Great Valley Valley Oak Riparian Forest	Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	-	-	3812143	Elk Grove	Mapped	Community - Terrestrial - Great Valley Valley Oak Riparian Forest
Community - Terrestrial	Great Valley Valley Oak Riparian Forest	Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	-	-	3812133	Galt	Mapped	Community - Terrestrial - Great Valley Valley Oak Riparian Forest
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812133	Galt	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812132	Clay	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool

Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812143	Elk Grove	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812134	Bruceville	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812142	Sloughhouse	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812153	Carmichael	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812144	Florin	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	CTT44110CA	None	None	-	-	3812152	Buffalo Creek	Mapped	Community - Terrestrial - Northern Hardpan Vernal Pool
Community - Terrestrial	Valley Oak Woodland	Valley Oak Woodland	CTT71130CA	None	None	-	-	3812134	Bruceville	Mapped	Community - Terrestrial - Valley Oak Woodland
Community - Terrestrial	Valley Oak Woodland	Valley Oak Woodland	CTT71130CA	None	None	-	-	3812133	Galt	Mapped	Community - Terrestrial - Valley Oak Woodland
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812133	Galt	Mapped	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812134	Bruceville	Mapped	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812142	Sloughhouse	Mapped	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812143	Elk Grove	Mapped	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812144	Florin	Mapped and Unprocessed	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812153	Carmichael	Mapped	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	3812154	Sacramento East	Mapped and Unprocessed	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Cicuta maculata var. bolanderi	Bolander's water-hemlock	PDAP10M051	None	None	-	2B.1	3812134	Bruceville	Mapped	Plants - Vascular - Apiaceae - Cicuta maculata var. bolanderi
Plants - Vascular	Lilaeopsis masonii	Mason's lilaeopsis	PDAP119030	None	Rare	-	1B.1	3812134	Bruceville	Mapped	Plants - Vascular - Apiaceae - Lilaeopsis masonii
Plants - Vascular	Centromadia parryi ssp. rudis	Parry's rough tarplant	PDAST4R0P3	None	None	-	4.2	3812134	Bruceville	Unprocessed	Plants - Vascular - Asteraceae - Centromadia parryi ssp. rudis
Plants - Vascular	Centromadia parryi ssp. rudis	Parry's rough tarplant	PDAST4R0P3	None	None	-	4.2	3812144	Florin	Unprocessed	Plants - Vascular - Asteraceae - Centromadia parryi ssp. rudis
Plants - Vascular	Hesperervax caulescens	hogwallow starfish	PDASTE5020	None	None	-	4.2	3812144	Florin	Unprocessed	Plants - Vascular - Asteraceae - Hesperervax caulescens
Plants - Vascular	Lasthenia ferrisiae	Ferris' goldfields	PDAST5L070	None	None	-	4.2	3812134	Bruceville	Unprocessed	Plants - Vascular - Asteraceae - Lasthenia ferrisiae

Plants - Vascular	<i>Lepidium latipes</i> var. <i>heckardii</i>	Heckard's pepper-grass	PDBRA1M0K1	None	None	-	1B.2	3812144	Florin	Mapped	Plants - Vascular - Brassicaceae - <i>Lepidium latipes</i> var. <i>heckardii</i>
Plants - Vascular	<i>Brasenia schreberi</i>	watershield	PDCAB01010	None	None	-	2B.3	3812134	Bruceville	Mapped	Plants - Vascular - Cabombaceae - <i>Brasenia schreberi</i>
Plants - Vascular	<i>Downingia pusilla</i>	dwarf downingia	PDCAM060C0	None	None	-	2B.2	3812133	Galt	Mapped	Plants - Vascular - Campanulaceae - <i>Downingia pusilla</i>
Plants - Vascular	<i>Downingia pusilla</i>	dwarf downingia	PDCAM060C0	None	None	-	2B.2	3812132	Clay	Mapped	Plants - Vascular - Campanulaceae - <i>Downingia pusilla</i>
Plants - Vascular	<i>Downingia pusilla</i>	dwarf downingia	PDCAM060C0	None	None	-	2B.2	3812143	Elk Grove	Mapped	Plants - Vascular - Campanulaceae - <i>Downingia pusilla</i>
Plants - Vascular	<i>Downingia pusilla</i>	dwarf downingia	PDCAM060C0	None	None	-	2B.2	3812144	Florin	Mapped	Plants - Vascular - Campanulaceae - <i>Downingia pusilla</i>
Plants - Vascular	<i>Legenere limosa</i>	legenere	PDCAM0C010	None	None	-	1B.1	3812144	Florin	Mapped	Plants - Vascular - Campanulaceae - <i>Legenere limosa</i>
Plants - Vascular	<i>Legenere limosa</i>	legenere	PDCAM0C010	None	None	-	1B.1	3812152	Buffalo Creek	Mapped	Plants - Vascular - Campanulaceae - <i>Legenere limosa</i>
Plants - Vascular	<i>Legenere limosa</i>	legenere	PDCAM0C010	None	None	-	1B.1	3812153	Carmichael	Mapped	Plants - Vascular - Campanulaceae - <i>Legenere limosa</i>
Plants - Vascular	<i>Legenere limosa</i>	legenere	PDCAM0C010	None	None	-	1B.1	3812143	Elk Grove	Mapped	Plants - Vascular - Campanulaceae - <i>Legenere limosa</i>
Plants - Vascular	<i>Legenere limosa</i>	legenere	PDCAM0C010	None	None	-	1B.1	3812142	Sloughhouse	Mapped	Plants - Vascular - Campanulaceae - <i>Legenere limosa</i>
Plants - Vascular	<i>Legenere limosa</i>	legenere	PDCAM0C010	None	None	-	1B.1	3812132	Clay	Mapped	Plants - Vascular - Campanulaceae - <i>Legenere limosa</i>
Plants - Vascular	<i>Legenere limosa</i>	legenere	PDCAM0C010	None	None	-	1B.1	3812133	Galt	Mapped	Plants - Vascular - Campanulaceae - <i>Legenere limosa</i>
Plants - Vascular	<i>Legenere limosa</i>	legenere	PDCAM0C010	None	None	-	1B.1	3812134	Bruceville	Mapped	Plants - Vascular - Campanulaceae - <i>Legenere limosa</i>
Plants - Vascular	<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder	PDCUS01111	None	None	-	2B.2	3812144	Florin	Mapped	Plants - Vascular - Cuscutaceae - <i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>
Plants - Vascular	<i>Carex comosa</i>	bristly sedge	PMCYP032Y0	None	None	-	2B.1	3812134	Bruceville	Mapped	Plants - Vascular - Cyperaceae - <i>Carex comosa</i>
Plants - Vascular	<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Delta tule pea	PDFAB250D2	None	None	-	1B.2	3812134	Bruceville	Mapped	Plants - Vascular - Fabaceae - <i>Lathyrus jepsonii</i> var. <i>jepsonii</i>
Plants - Vascular	<i>Trifolium hydrophilum</i>	saline clover	PDFAB400R5	None	None	-	1B.2	3812134	Bruceville	Mapped	Plants - Vascular - Fabaceae - <i>Trifolium hydrophilum</i>
Plants - Vascular	<i>Trifolium hydrophilum</i>	saline clover	PDFAB400R5	None	None	-	1B.2	3812144	Florin	Mapped	Plants - Vascular - Fabaceae - <i>Trifolium hydrophilum</i>
Plants - Vascular	<i>Juglans hindsii</i>	Northern California black walnut	PDJUG02040	None	None	-	1B.1	3812144	Florin	Mapped	Plants - Vascular - Juglandaceae - <i>Juglans hindsii</i>
Plants - Vascular	<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	PMJUN011L1	None	None	-	1B.2	3812152	Buffalo Creek	Mapped	Plants - Vascular - Juncaceae - <i>Juncus leiospermus</i> var. <i>ahartii</i>

Plants - Vascular	<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	PMJUN011L1	None	None	-	1B.2	3812153	Carmichael	Mapped	Plants - Vascular - Juncaceae - <i>Juncus leiospermus</i> var. <i>ahartii</i>
Plants - Vascular	<i>Scutellaria galericulata</i>	marsh skullcap	PDLAM1U0J0	None	None	-	2B.2	3812134	Bruceville	Mapped	Plants - Vascular - Lamiaceae - <i>Scutellaria galericulata</i>
Plants - Vascular	<i>Scutellaria lateriflora</i>	side-flowering skullcap	PDLAM1U0Q0	None	None	-	2B.2	3812134	Bruceville	Mapped	Plants - Vascular - Lamiaceae - <i>Scutellaria lateriflora</i>
Plants - Vascular	<i>Fritillaria agrestis</i>	stinkbells	PMLILOV010	None	None	-	4.2	3812142	Sloughhouse	Unprocessed	Plants - Vascular - Liliaceae - <i>Fritillaria agrestis</i>
Plants - Vascular	<i>Fritillaria agrestis</i>	stinkbells	PMLILOV010	None	None	-	4.2	3812154	Sacramento East	Unprocessed	Plants - Vascular - Liliaceae - <i>Fritillaria agrestis</i>
Plants - Vascular	<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	wooly rose-mallow	PDMAL0H0R3	None	None	-	1B.2	3812144	Florin	Mapped	Plants - Vascular - Malvaceae - <i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>
Plants - Vascular	<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	wooly rose-mallow	PDMAL0H0R3	None	None	-	1B.2	3812134	Bruceville	Mapped	Plants - Vascular - Malvaceae - <i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>
Plants - Vascular	<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	-	1B.2	3812142	Sloughhouse	Mapped	Plants - Vascular - Plantaginaceae - <i>Gratiola heterosepala</i>
Plants - Vascular	<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	-	1B.2	3812143	Elk Grove	Mapped	Plants - Vascular - Plantaginaceae - <i>Gratiola heterosepala</i>
Plants - Vascular	<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	-	1B.2	3812152	Buffalo Creek	Mapped	Plants - Vascular - Plantaginaceae - <i>Gratiola heterosepala</i>
Plants - Vascular	<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	-	1B.2	3812153	Carmichael	Mapped	Plants - Vascular - Plantaginaceae - <i>Gratiola heterosepala</i>
Plants - Vascular	<i>Orcuttia tenuis</i>	slender Orcutt grass	PMPOA4G050	Threatened	Endangered	-	1B.1	3812152	Buffalo Creek	Mapped	Plants - Vascular - Poaceae - <i>Orcuttia tenuis</i>
Plants - Vascular	<i>Orcuttia tenuis</i>	slender Orcutt grass	PMPOA4G050	Threatened	Endangered	-	1B.1	3812143	Elk Grove	Mapped	Plants - Vascular - Poaceae - <i>Orcuttia tenuis</i>
Plants - Vascular	<i>Orcuttia viscida</i>	Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	-	1B.1	3812143	Elk Grove	Mapped	Plants - Vascular - Poaceae - <i>Orcuttia viscida</i>
Plants - Vascular	<i>Orcuttia viscida</i>	Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	-	1B.1	3812152	Buffalo Creek	Mapped	Plants - Vascular - Poaceae - <i>Orcuttia viscida</i>
Plants - Vascular	<i>Orcuttia viscida</i>	Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	-	1B.1	3812153	Carmichael	Mapped	Plants - Vascular - Poaceae - <i>Orcuttia viscida</i>
Plants - Vascular	<i>Navarretia eriocephala</i>	hoary navarretia	PDPLM0C060	None	None	-	4.3	3812143	Elk Grove	Unprocessed	Plants - Vascular - Polemoniaceae - <i>Navarretia eriocephala</i>
Plants - Vascular	<i>Limosella australis</i>	Delta mudwort	PDSCR10050	None	None	-	2B.1	3812134	Bruceville	Mapped	Plants - Vascular - Scrophulariaceae - <i>Limosella australis</i>

Plant List

24 matches found. *Click on scientific name for details*

Search Criteria

Found in 9 Quads around 38121D3

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
<u>Brasenia schreberi</u>	watershield	Cabombaceae	perennial rhizomatous herb	2B.3	S2	G5
<u>Carex comosa</u>	bristly sedge	Cyperaceae	perennial rhizomatous herb	2B.1	S2	G5
<u>Centromadia parryi ssp. rudis</u>	Parry's rough tarplant	Asteraceae	annual herb	4.2	S3.2	G3T3
<u>Cicuta maculata var. bolanderi</u>	Bolander's water-hemlock	Apiaceae	perennial herb	2B.1	S2	G5T3T4
<u>Cuscuta obtusiflora var. glandulosa</u>	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	2B.2	SH	G5T4T5
<u>Downingia pusilla</u>	dwarf downingia	Campanulaceae	annual herb	2B.2	S2	GU
<u>Gratiola heterosepala</u>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	S2	G2
<u>Hesperervax caulescens</u>	hogwallow starfish	Asteraceae	annual herb	4.2	S3.2	G3
<u>Hibiscus lasiocarpus var. occidentalis</u>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb	1B.2	S2	G5T2
<u>Juglans hindsii</u>	Northern California black walnut	Juglandaceae	perennial deciduous tree	1B.1	S1	G1
<u>Juncus leiospermus var. ahartii</u>	Ahart's dwarf rush	Juncaceae	annual herb	1B.2	S1	G2T1
<u>Lasthenia ferrisiae</u>	Ferris' goldfields	Asteraceae	annual herb	4.2	S3.2	G3
<u>Lathyrus jepsonii var. jepsonii</u>	Delta tule pea	Fabaceae	perennial herb	1B.2	S2	G5T2
<u>Legenere limosa</u>	legenere	Campanulaceae	annual herb	1B.1	S2	G2
<u>Lepidium latipes var. heckardii</u>	Heckard's pepper-grass	Brassicaceae	annual herb	1B.2	S2	G4T2
<u>Lilaeopsis masonii</u>	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	1B.1	S2	G2
<u>Limosella australis</u>	Delta mudwort	Scrophulariaceae	perennial stoloniferous herb	2B.1	S2	G4G5
<u>Navarretia eriocephala</u>	hoary navarretia	Polemoniaceae	annual herb	4.3	S3.3	G3
<u>Orcuttia tenuis</u>	slender Orcutt grass	Poaceae	annual herb	1B.1	S2	G2
<u>Orcuttia viscida</u>	Sacramento Orcutt grass	Poaceae	annual herb	1B.1	S1	G1
<u>Sagittaria sanfordii</u>	Sanford's arrowhead	Alismataceae		1B.2	S3	G3

<u>Scutellaria galericulata</u>	marsh skullcap	Lamiaceae	perennial rhizomatous herb	2B.2	S2	G5
<u>Scutellaria lateriflora</u>	side-flowering skullcap	Lamiaceae	perennial rhizomatous herb	2B.2	S1	G5
<u>Trifolium hydrophilum</u>	saline clover	Fabaceae	annual herb	1B.2	S2	G2

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U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office

**Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the Counties and/or
U.S.G.S. 7 1/2 Minute Quads you requested**

Document Number: 141023111019

Current as of: October 23, 2014

Quad Lists

Listed Species

Invertebrates

Branchinecta conservatio

Conservancy fairy shrimp (E)

Branchinecta lynchi

Critical habitat, vernal pool fairy shrimp (X)

vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus

Critical habitat, valley elderberry longhorn beetle (X)

valley elderberry longhorn beetle (T)

Lepidurus packardii

Critical habitat, vernal pool tadpole shrimp (X)

vernal pool tadpole shrimp (E)

Fish

Acipenser medirostris

green sturgeon (T) (NMFS)

Hypomesus transpacificus

Critical habitat, delta smelt (X)

delta smelt (T)

Oncorhynchus mykiss

Central Valley steelhead (T) (NMFS)

Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha

Central Valley spring-run chinook salmon (T) (NMFS)

Critical Habitat, Central Valley spring-run chinook (X) (NMFS)

winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense

California tiger salamander, central population (T)

Critical habitat, CA tiger salamander, central population (X)

Rana draytonii

California red-legged frog (T)

Reptiles

Thamnophis gigas

giant garter snake (T)

Plants

Castilleja campestris ssp. succulenta

Critical habitat, succulent (=fleshy) owl's-clover (X)

succulent (=fleshy) owl's-clover (T)

Orcuttia tenuis

Critical habitat, slender Orcutt grass (X)

slender Orcutt grass (T)

Orcuttia viscida

Critical habitat, Sacramento Orcutt grass (X)

Sacramento Orcutt grass (E)

Quads Containing Listed, Proposed or Candidate Species:

SLOUGHHOUSE (495B)

CLAY (495C)

ELK GROVE (496A)

FLORIN (496B)

BRUCEVILLE (496C)

GALT (496D)

BUFFALO CREEK (511C)

SACRAMENTO EAST (512C)

CARMICHAEL (512D)

County Lists

Sacramento County

Listed Species

Invertebrates

Apodemia mormo langei

Lange's metalmark butterfly (E)

Branchinecta conservatio

Conservancy fairy shrimp (E)

Branchinecta lynchi

Critical habitat, vernal pool fairy shrimp (X)

vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus

Critical habitat, valley elderberry longhorn beetle (X)

valley elderberry longhorn beetle (T)

Elaphrus viridis

delta green ground beetle (T)

Lepidurus packardii

Critical habitat, vernal pool tadpole shrimp (X)

vernal pool tadpole shrimp (E)

Fish

Acipenser medirostris

green sturgeon (T) (NMFS)

Hypomesus transpacificus

Critical habitat, delta smelt (X)

delta smelt (T)

Oncorhynchus mykiss

Central Valley steelhead (T) (NMFS)

Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha

Central Valley spring-run chinook salmon (T) (NMFS)
Critical Habitat, Central Valley spring-run chinook (X) (NMFS)
Critical habitat, winter-run chinook salmon (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense

California tiger salamander, central population (T)
Critical habitat, CA tiger salamander, central population (X)

Rana draytonii

California red-legged frog (T)

Reptiles

Thamnophis gigas

giant garter snake (T)

Birds

Charadrius alexandrinus nivosus

western snowy plover (T)

Rallus longirostris obsoletus

California clapper rail (E)

Sternula antillarum (=Sterna, =albifrons) browni

California least tern (E)

Vireo bellii pusillus

Least Bell's vireo (E)

Mammals

Reithrodontomys raviventris

salt marsh harvest mouse (E)

Sylvilagus bachmani riparius

riparian brush rabbit (E)

Vulpes macrotis mutica

San Joaquin kit fox (E)

Plants

Arctostaphylos myrtifolia

Ione manzanita (T)

Calystegia stebbinsii

Stebbins's morning-glory (E)

Castilleja campestris ssp. succulenta

Critical habitat, succulent (=fleshy) owl's-clover (X)
succulent (=fleshy) owl's-clover (T)

- Ceanothus roderickii*
Pine Hill ceanothus (E)
- Cordylanthus mollis ssp. mollis*
soft bird's-beak (E)
- Cordylanthus palmatus*
palmate-bracted bird's-beak (E)
- Eriogonum apricum var. apricum*
Ione buckwheat (E)
- Eriogonum apricum var. prostratum*
Irish Hill buckwheat (E)
- Erysimum capitatum ssp. angustatum*
Contra Costa wallflower (E)
Critical Habitat, Contra Costa wallflower (X)
- Fremontodendron californicum ssp. decumbens*
Pine Hill flannelbush (E)
- Galium californicum ssp. sierrae*
El Dorado bedstraw (E)
- Lasthenia conjugens*
Contra Costa goldfields (E)
- Neostapfia colusana*
Colusa grass (T)
- Oenothera deltooides ssp. howellii*
Antioch Dunes evening-primrose (E)
Critical habitat, Antioch Dunes evening-primrose (X)
- Orcuttia tenuis*
Critical habitat, slender Orcutt grass (X)
slender Orcutt grass (T)
- Orcuttia viscida*
Critical habitat, Sacramento Orcutt grass (X)
Sacramento Orcutt grass (E)
- Senecio layneae*
Layne's butterweed (=ragwort) (T)
- Sidalcea keckii*
Keck's checker-mallow (=checkerbloom) (E)

Candidate Species

Birds

Coccyzus americanus occidentalis
Western yellow-billed cuckoo (C)

Key:

- (E) *Endangered* - Listed as being in danger of extinction.
- (T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
- (P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat* - Area essential to the conservation of a species.
- (PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
- (C) *Candidate* - Candidate to become a proposed species.
- (V) *Vacated* by a court order. Not currently in effect. Being reviewed by the Service.
- (X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online [Inventory of Rare and Endangered Plants](#).

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our [Protocol](#) and [Recovery Permits](#) pages.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be January 21, 2015.

Species Summary for 99 Cent Store, Elk Grove

Scientific Name	Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Habitat	Habitat Present/ Absent	Impact Potential
<i>Hypemys maysi</i>	delta smelt	FI	SE		Distribution includes the Sacramento River below Suisun, San Joaquin River below Mendocino, and Suisun Bay. Spawning areas include the Sacramento River below Sacramento, Mendocino River vs stem, Cache Slough, the delta, and Montezuma Slough (USFWS 1995)	A	No effect. Suitable habitat not present.
<i>Zampetris oregonus</i>	Critical Habitat, de la anailt river, lamprey	X	SSC		Adults require clean, gravelly riffles in permanent streams for spawning, while the amphioxys require sandy backwaters or stream edges in which to bury themselves, where water quality is continually high and temperatures do not exceed 25°C. (Moye et al. 2014)	A	No effect. Suitable habitat not present.
<i>Myiophobus oregonus</i>	brilliant	FI	SSC		Small to large streams in a low to mid-elevation environment. May also inhabit lakes or reservoirs. Their preferred stream temperature might easily exceed 20°C, though these fish do not favor low dissolved oxygen levels. Therefore the hatched minnow is usually found in clear deep streams with a slow but present flow. Though spawning may occur in pools, runs, or riffles, the breeding area will typically be characterized by gravel and rocky substrate (California 2014)	A	No effect. Suitable habitat not present.
<i>Atherinops affinis</i>	Central Valley steelhead	FI	SSC		Spawning habitat = gravel-bottomed, fast-flowing, well-oxygenated rivers and streams. Non-spawning = estuarine, marine waters (Hagy, 1996)	A	No effect. Project site is not within or adjacent to a critical habitat unit.
<i>Pogonichthys californicus</i>	Central Valley springrun	X	ST		Spawning habitat = fast moving, freshwater streams and rivers. Juvenile habitat = brackish estuaries. Non-spawning = marine waters (Myers 1998)	A	No effect. Suitable habitat not present.
<i>Pogonichthys californicus</i>	Critical Habitat, Central Valley springrun chinook salmon	X	SSC		Prefer slow-moving sections of freshwater rivers and sloughs. Most abundant in Suisun Bay and Marsh region. Largely absent from Sacramento River except during spawning (USFWS 1995)	A	No effect. Suitable habitat not present.
<i>Pogonichthys californicus</i>	Central Valley chinook salmon	FI	SSC		Adults and juveniles require soft or brackish estuary waters. Spawning takes place in freshwater over sandy gravel substrates, rocks, and aquatic plants (Moye et al. 1995)	A	No effect. Suitable habitat not present.
<i>Pogonichthys californicus</i>	Central Valley fall-run FSI	FI	SSC			A	No effect. Suitable habitat not present.
<i>Pogonichthys californicus</i>	Sacramento splittail	FI	SSC			A	No effect. Suitable habitat not present.
<i>Pogonichthys californicus</i>	longfin smelt	FI	ST/SSC			A	No effect. Suitable habitat not present.
<i>Pogonichthys californicus</i>	California tiger salamander, central population	F	ST		Occurs in grasslands of the Central Valley and oak savannah communities in the Central Valley, the Sierra Nevada and Coast ranges, and the San Francisco Bay area. Needs seasonal or semi-permanent wetlands to reproduce, and terrestrial habitat with active ground covered by gopher burrows (Hovdey 2015)	A	No effect. Suitable habitat not present.
<i>Pogonichthys californicus</i>	Critical Habitat, CA tiger salamander, central population	X	SSC		Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and streambeds with plant cover. Most common in lowlands or foothills. Frequently found in wetlands adjacent to streams. Breeding habitat is in permanent or ephemeral water sources, lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Fragmented wetland habitats require annual burrows or other moist refuges for saturation when the wetlands are dry. From sea level to 5,000 ft. (1,523 m.) (Baftz 2014)	A	No effect. Suitable habitat not present.
<i>Pogonichthys californicus</i>	California tree-toad frog	F	SSC		Open areas with sandy/gravelly soils. Variable habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows which do not contain mudflaps. Fall, or emigration necessary for breeding. (Baftz 2014)	A	No effect. Suitable habitat not present.
<i>Pogonichthys californicus</i>	western spadetail	FI	SSC			A	No effect. Suitable habitat not present.
<i>Pogonichthys californicus</i>	western pond turtle	FI	SSC		Found in ponds, lakes, rivers, streams, creeks, meadows, and irrigation ditches, in the abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grasslands. In streams, prefers pools to shallow areas. Eggs, rocks, central mats, and exposed banks are required for basking. May enter brackish water and even estuaries. Tolerant of salinity from sea level to over 5,000 ft. (1,500 m.) (Baftz 2014)	A	No effect. Suitable habitat not present.

Species Summary for 99 Cent Store, Elk Grove

Scientific Name	Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Habitat	Habitat Present/Absent	Impact Potential
<i>Thamnopis eggeri</i>	giant garter snake	FT	NT		Marsh Marshes, sloughs, ponds, small lakes, low gradient stream, irrigation and drainage canals, rice fields and their associated uplands. Upland habitat should have burrows or other soil crevices suitable for snakes to reside during their dormancy period (November- mid March). Ranges in the Central Valley from Butte County in Butte Vista Lake in Kern County, Endemic to valley floor wetlands (USFWS 2012)	A	No effect. Suitable habitat not present.
<i>Agelaius arcticus</i>	tricolored blackbird	-	SSC		Nest in wetlands or in dense vegetation near open water. Dominant nesting subspecies: ornate, bold-necked, black-bills, agricultural sedge. Nesting substrate may either be flooded, open areas or in some way defended against predators (Bridgman 2004).	A	No effect. Suitable habitat not present.
<i>Tringa americana</i>	great-shopper sanderling	-	SSC		In the foothills and low bank west of the Coscochesurres. Dry, dense grasslands, especially those with a variety of grasses and tall herbs and scattered shrubs for nesting (CJRW 2014b). Requirement: scrub oak or riparian throughout.	A	No effect. Suitable habitat not present. (Present in some areas, but not all species; shrubs are absent)
<i>Lophia chorulata</i>	golden eagle	-	FP		California, except center of Central Valley. Habitat typically rolling foothills, mountain areas, sage-covered hills, desert (CJRW 2014b).	A	No effect. Suitable habitat not present.
<i>Hirundo lunifrons</i>	burrowing owl	-	SSC		Open, flat expanses with short, sparse vegetation and low shrubs, level to gentle topography and well-drained soils. Requires underground burrows or cavities for nesting and roosting. Can use rock crevices, debris pits, riparian cutovers of bareness areas (table 1b) in the arid grassland, shrub steppe, desert, agricultural lands, vernal pools and pastures (CJRW 2014b).	A	No effect. Suitable habitat not present. Western portion of project site is barren, compacted soil (with a few sage burrows). Eastern portion is dense, relatively well grassland.
<i>Buteo swainsoni</i>	Swainson's hawk	-	NT		Nests in stands with few trees in riparian areas, juniper sage flats, and oak savannah in the Central Valley. Forages in adjacent grasslands, agricultural fields and pastures (CJRW 2014b).	A	No effect. Suitable habitat not present. (Present in some areas, but not all species; shrubs are absent)
<i>Thryothorus niger</i>	vesper sparrow	-	SSC		Prefer redwood and Douglas fir habitats with nest sites in large hollow trees and snags, especially tall, burnt-out snags (CJRW 2014b).	A	No effect. Suitable habitat not present.
<i>Thryothorus niger</i>	vesper sparrow	-	SSC		Nest on the ground in patches of dense, tall vegetation in undisturbed areas. Breed and forage in variety of open habitats such as marshes, wet meadows, weedy borders of lakes, rivers and streams, grasslands, wetlands, croplands, scrubland flats and desert shrubs (Shuford 2009). Nests on ground in shrubby vegetation, usually at marsh edge, next to a large mound of sticks in wet areas (CJRW 2014).	A	No effect. Suitable habitat not present.
<i>Thryothorus niger</i>	vesper sparrow	-	SSC		Requires large, dense forests of riparian woodland with well-developed understories. Occurs in deciduous trees or shrubs. Prefers willow, but will also nest in reedbeds adjacent to streams in Sacramento Valley. Restricted to moist habitats along slow-moving waterways during breeding season (CJRW 2014b).	A	No effect. Suitable habitat not present.
<i>Thryothorus niger</i>	vesper sparrow	-	SSC		Typically nest in the upper limit of trees that may be 10-150 ft (3-45.7 m) tall. These can be near-country trees growing in isolation, or at the edge of or within forest (Sorensen 2013).	A	No effect. Suitable habitat not present.
<i>Thryothorus niger</i>	vesper sparrow	-	FP		In summer, occurs in and near wet meadows, shallow water, and fresh emergent wetland habitats. In winter, frequents moist croplands with rice or corn stubble and open, emergent wetlands. Prefers weedy plants. Nests in remote portions of extensive wetlands or sometimes along riverbanks (CJRW 2014b).	A	No effect. Suitable habitat not present.
<i>Thryothorus niger</i>	vesper sparrow	-	SSC		Large, freshwater wetlands with dense emergent trees in combination with open woodlands with a fair amount of grass cover and areas of bare ground (Shuford 2009).	A	No effect. Suitable habitat not present.
<i>Thryothorus niger</i>	vesper sparrow	-	SSC		Occurs in riparian woodlands, riparian forest, riparian emergent wetland, and wet meadows. Breeds in riparian thickets of willow, other shrubs, vines, tall herbs, and fresh or saline emergent vegetation (CJRW 2014b).	A	No effect. Suitable habitat not present.
<i>Thryothorus niger</i>	vesper sparrow	-	SSC		Woodland and forest habitats with numerous suitable nest cavities, open air space above nest sites, and actual insect prey (Shuford 2008).	A	No effect. Suitable habitat not present.

Species Summary for 99 Cent Store, Elk Grove

Scientific Name	Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Habitat	Habitat Present/Absent	Impact Potential
<i>Riparia riparia</i>	bank swallow	-	ST	■	riparian areas with shrubs, vertical bluffs or overbanks. Also nest in earthen banks and bluffs, as well as sand and gravel pits (CJFW 2014b)	A	No effect. Suitable habitat not present.
<i>Sturnella antillarum</i>	California least tern	FE	SE/EP	■	nest and roost in colonies on open beaches, dunes, near shore ocean water, and in shallow estuarine sediments (USFWS 2006)	A	No effect. Suitable habitat not present.
<i>Vanhoepshodus swainsonii</i>	yellow-throated blackbird	-	SSC	■	nest in marshes with tall, emergent vegetation or grasses and cattails adjacent to deepwater (Shuford 2008)	A	No effect. Suitable habitat not present.
Mammals							
<i>Lepus sylvaticus</i>	western rabbit	-	SSC	■	feeding habits include forests and woodlands, often in edge habitats adjacent to streams, fields, or urban areas (CJFW 2014b)	A	No effect. Suitable habitat not present.
<i>Tamias amoenus</i>	American badger	-	SSC	■	open shrub, forest and herbaceous habitats with friable soils. Associated with treeless regions, prairies, parks, fields and cold desert steppes. Range includes most of California, except the North Coast (CJFW 2014b)	F	No effect. Suitable habitat may be present; however, densely urban surroundings preclude the presence of this species

Source: CJFW 2014a, CNPS 2011, USFWS 2011

Key

- Federal & State Status**
- (C) Federal Candidate
- (D) Federally Declared
- (E) Federal Designated
- (F) Fully Protected
- (FD) Federal Threatened
- (FP) Proposed Threatened
- (S) State Candidate/Endangered
- (SC) State Candidate/Threatened
- (SS) State Endangered
- (SR) State Rare
- (SSC) State Species of Special Concern
- (ST) State Threatened
- (X) Federally Designated Critical Habitat
- CNPS Rare Plant Rank**
- Rare or Rare*
- (A) Presumed Extinct in California
- (B) Rare, Threatened, or Endangered in California and Elsewhere
- (C) Rare, Threatened, or Endangered in California, But More Common Elsewhere
- Threat Rank*
- (1) Seriously Threatened in California
- (2) Fairly Threatened in California
- (3) Not yet threatened in California

References

Bauer, B. C., 2010. A Status Review of the California Tiger Salamander (*Ambystoma tigrinum californicum*). Nongame Wildlife Program Report 21144. Sacramento, CA.

Bied, P. J., C. Wainwright, G. J. Bryant, L. J. Jernigan, R. S. Waples, F. W. Waknitz, and L. V. Lagomastro. 1996. Status review of west coast steel head from Washington, Idaho, Oregon, and California. NOAA Technical Memorandum NMFS-NWFSC-27. Seattle, WA.

California Department of Fish and Wildlife (CDFW). 2014a. California Natural Diversity Database - May 2014 update. CJFW. Biogeographic Data Branch, Sacramento, CA.

_____. 2014b. California Wildlife Habitat Relationships System Life History Accounts and Range Maps (online edition). CJFW Biogeographic Data Branch, Sacramento, CA. Accessed May 2014. Available at: <http://www.dfg.ca.gov/bgs/bgsdatacenter/dwhr/dwhr.asp>.

California Fish Website (CalFish). 2014. Hardhead (Myliobatis californica). IUCN Division of Agriculture and Natural Resources, Davis, CA. Available at: <http://calfish.ucdavis.edu/species/?id=17&id=24#>.

California Native Plant Society (CNPS). 2014. Inventory of Rare and Endangered Plants (online edition, v4.72). CNPS, Sacramento, CA. Accessed May 2014. Available at: <http://www.cnpsplants.org/>.

Hamilton, W. J. 2004. Frosted Blackbird (*Agelaius melanotos*) in The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California. California Partners in Flight. Aug. 18 2002. Least Bell's Vireo (*Vireo bellii pusillus*) in The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California. California Partners in Flight.

Moyle, P. B., H. M. Yocum, J. E. Williams, and H. D. Wainwright. 1995. Fish Species of Special Concern in California. San Joaquin and Tulare Basins, Sacramento, CA.

Myers, J. M., R. G. Kope, G. J. Bryant, J. J. Teel, L. J. Jernigan, W. S. Grant, F. W. Waknitz, K. Neely, S. T. Lindley, and R. S. Waples. 1998. Status review of Chinook salmon from Washington, Idaho, Oregon, and California. NOAA Technical Memorandum NMFS-NWFSC-35.

Naris, J. 2014. California Native Plant Society (CNPS) 2014. Status review update. NMFS Southwest Fish Science Center, Santa Cruz, CA.

National Marine Fisheries Service (NMFS). 2005. Green Sturgeon (*Acipenser medirostris*) status review update. NMFS Southwest Fish Science Center, Santa Cruz, CA.

Natural Resources Conservation Service (NRCS). 2014. United States Department of Agriculture Web Soil Survey. 2.1 (online edition). Accessed on August 1. Available online at: <http://websoilsurvey.nrcs.usda.gov/app/landingPage.htm>.

Stinson, W. D. and G. S. L. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation in California. Studies of Western Birds 1, 138. Eastern Wildfowl Society, Camarillo, California, and California Department of Fish and Game, Sacramento.

_____. 1998. Conservation Guidelines for the Valley Elderberry | Longhorn Beetle. USFWS, Sacramento, CA.

_____. 2005. Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. USFWS, Portland, OR.

_____. 2006. California Least Tern. 5-Year Review. USFWS, Corvallis, CA.

_____. 2012. Great (river) Snaker (Thamnoschoenichthys). 5-Year Review: Summary and Evaluation. USFWS, Sacramento, CA.

_____. 2014. Sacramento Fish & Wildlife Office Species List. Accessed May 2014. Available at: http://www.fws.gov/sacramento_species_lists-form.htm.

C. CULTURAL

**CULTURAL RESOURCE ASSESSMENT
FOR THE 99 CENTS ONLY STORE PROJECT,
CITY OF ELK GROVE,
SACRAMENTO COUNTY, CALIFORNIA**

Prepared by

Peak & Associates, Inc.
3941 Park Drive, Suite 20 PMB 329
El Dorado Hills, CA 95762
(916) 939-2405

Prepared for

PMC
2729 Prospect Park Drive, Suite 220
Rancho Cordova, CA 95670

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(Job #14-081)

INTRODUCTION

The 99 Cents Only store project area is located on the east side of Elk Grove Florin Road and the north side of Brown Road in Elk Grove, California (Figures 1 and 2).

The proposed project is requesting a General Plan Amendment, Rezone, and Design Review. The entitlements would allow the development of a 20,000± square-foot retail sales building with truck loading well and associated parking, landscaping, and asphalt drive aisles on 3.48 acres (Figure 3)

The project area is in the northwest ¼ of the northwest ¼ of Section 19, Township 7 North and Range 6 East, MDB&M, mapped on the Elk Grove 7.5' topographic quadrangle (Figure 4).

Melinda Peak served as principal investigator for the project, with Robert Gerry completing the field survey of the project area on November 15, 2014 (resumes, Appendix 1).

STATE REGULATIONS

State historic preservation regulations affecting this project include the statutes and guidelines contained in the California Environmental Quality Act (CEQA; Public Resources Code sections 21083.2 and 21084.1 and sections 15064.5 and 15126.4 (b) of the CEQA Guidelines). CEQA Section 15064.5 requires that lead agencies determine whether projects may have a significant effect on archaeological and historical resources. Public Resources Code Section 21098.1 further cites: A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

An "historical resource" includes, but is not limited to, any object, building, structure, site, area, place, record or manuscript that is historically or archaeologically significant (Public Resources Code section 5020.1).

Advice on procedures to identify such resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor's Office of Planning and Research (OPR), *CEQA and Archaeological Resources*, 1994. The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associations and societies be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of the antiquity and provides for the sensitive treatment and disposition of those remains (California Health and Safety Code Section 7050.5, California Public Resources Codes Sections 5097.94 et al).

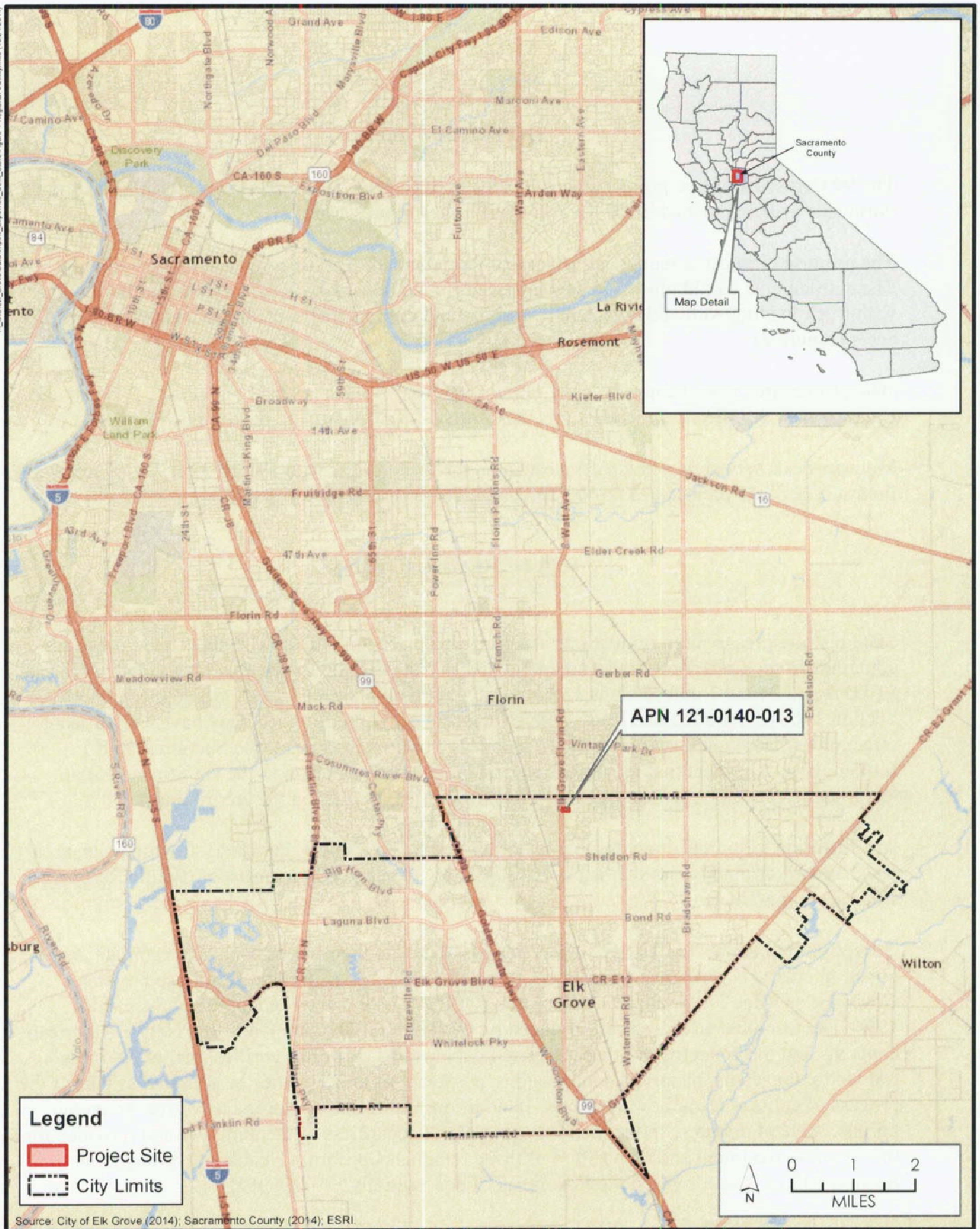


Figure 1
Regional Vicinity

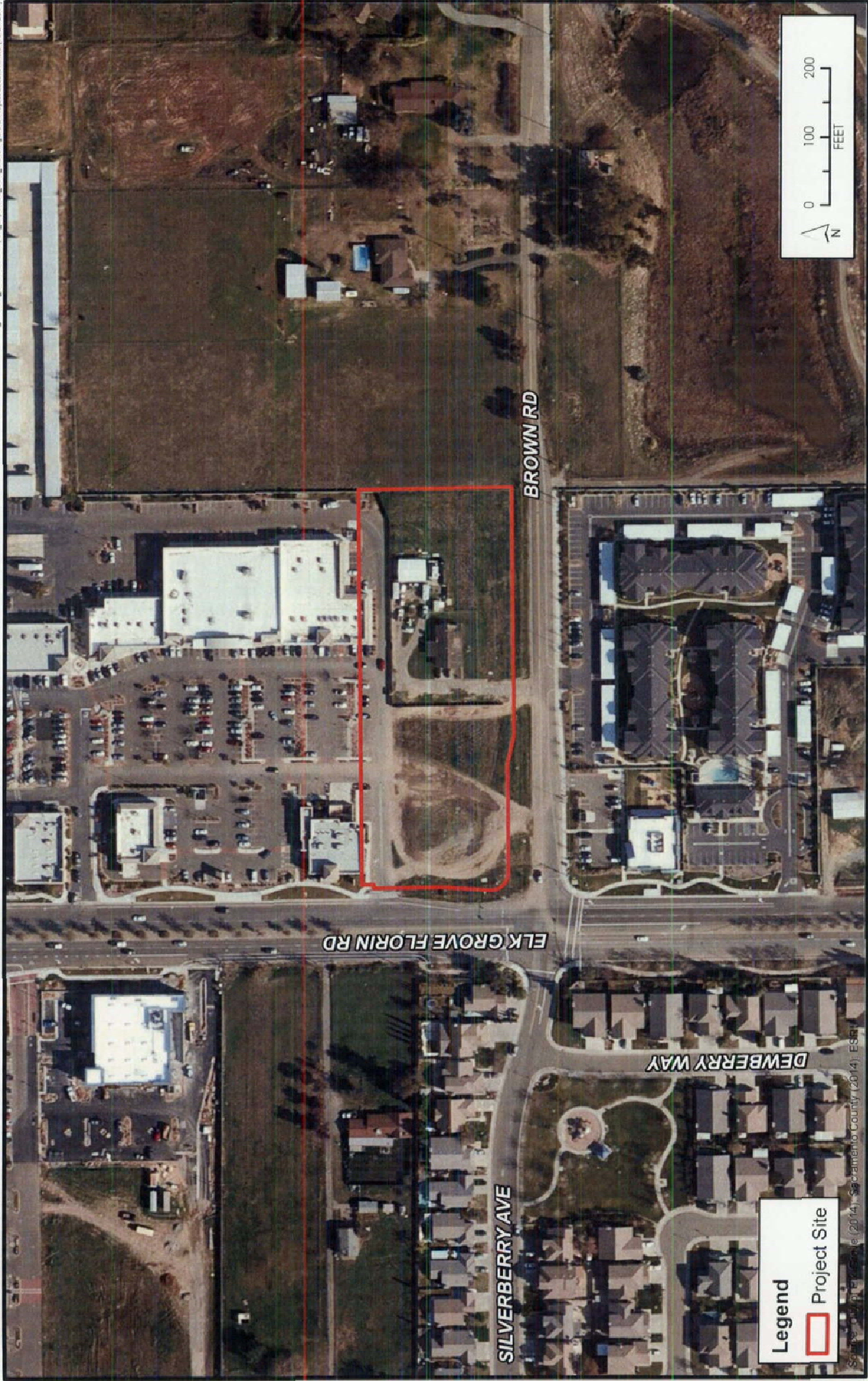


Figure 2
Project Location

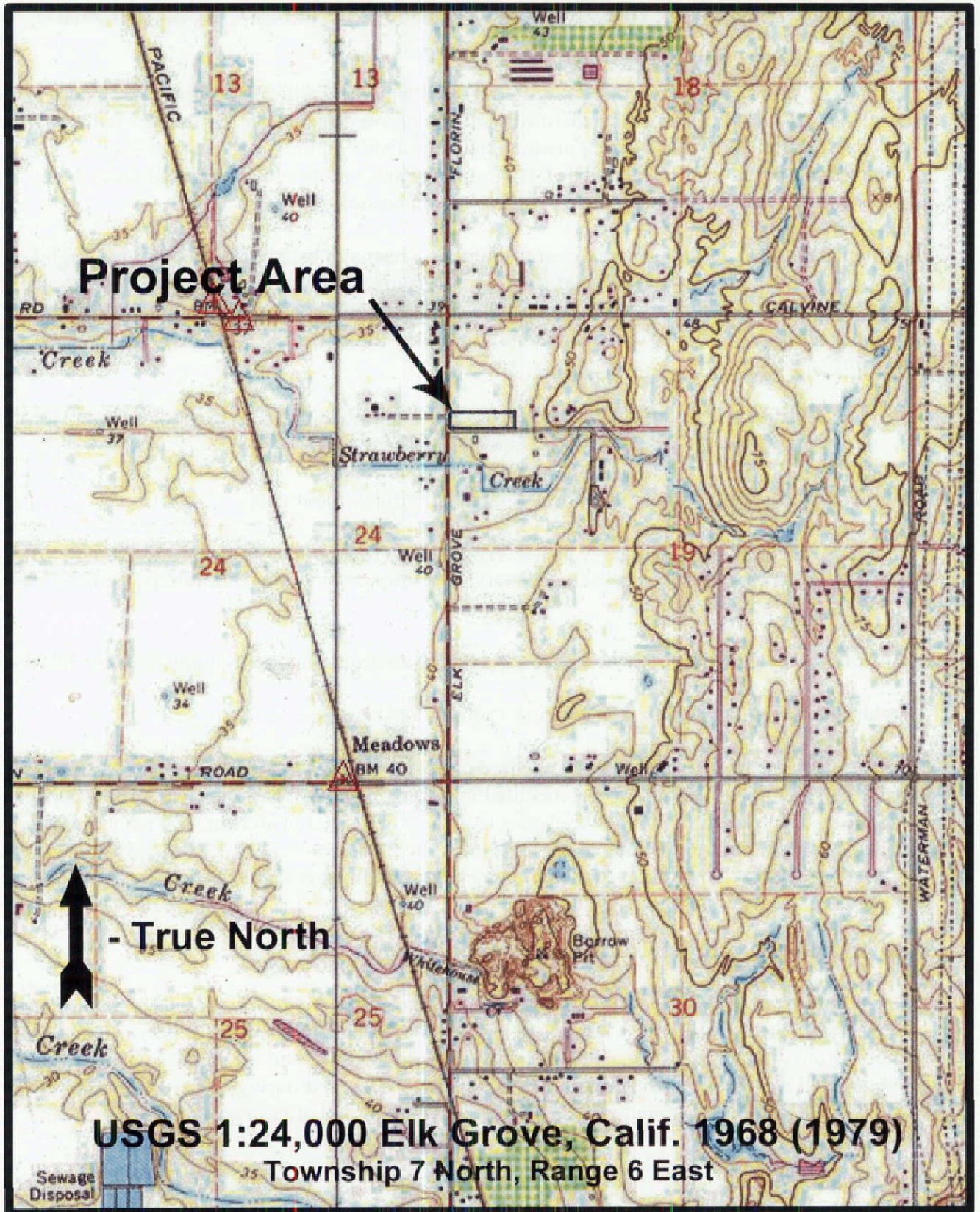


Figure 4

The California Register of Historical Resources (Public Resources Code Section 5020 et seq.)

The State Historic Preservation Office (SHPO) maintains the California Register of Historical Resources (CRHR). Properties listed, or formally designated as eligible for listing, on the National Register of Historic Places are automatically listed on the CRHR, as are State Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

For the purposes of CEQA, an historical resource is a resource listed in, or determined eligible for listing in the California Register of Historical Resources. When a project will impact a site, it needs to be determined whether the site is an historical resource. The criteria are set forth in Section 15064.5(a)(3) of the CEQA Guidelines, and are defined as any resource that does any of the following:

- A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B. Is associated with the lives of persons important in our past;
- C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, the CEQA Guidelines, Section 15064.5(a)(4) states:

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

California Health and Safety Code Sections 7050.5, 7051, And 7054

These sections collectively address the illegality of interference with human burial remains, as well as the disposition of Native American burials in archaeological sites. The law protects such remains from disturbance, vandalism, or inadvertent destruction, and establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, including the treatment of remains prior to, during, and after evaluation, and reburial procedures.

California Public Resources Code Section 15064.5(e)

This law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction. The section establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project and establishes the Native American Heritage Commission as the entity responsible to resolve disputes regarding the disposition of such remains.

CULTURAL HISTORY

Archeological Background

The Sacramento Delta was one of the first regions in California to attract intensive archeological fieldwork. Between 1893 and 1901, avocational archeologist J. A. Barr excavated many prehistoric mounds in the Stockton area. He collected nearly 2000 artifacts during the course of his investigations. H. C. Meredith was another avocational archeologist of the period who pursued collecting in the same Stockton locality. Meredith (1899, 1900) did publish a compilation of his own and Barr's findings, and these appear to constitute the earliest accounts of Delta archeology. Holmes (1902), from the Smithsonian Institution, further elaborated on the Delta or "Stockton District" archeology, presenting illustrations of artifacts collected by Meredith and Barr.

It was Elmer J. Dawson who first recognized culture changes through time in delta archeology. Though he was an amateur archeologist, Dawson understood the necessity of keeping accurate notes on grave associations and provenience of artifacts. He collaborated with W. E. Schenck to produce an overview of northern San Joaquin Valley archeology (Schenck and Dawson 1929). The overview contained information on more than 90 prehistoric sites as well as data on previous collectors.

By 1931, the focus of archeological work was directed toward the Cosumnes River locality, where survey and exploration were conducted by Sacramento Junior College (Lillard and Purves 1936). Excavations, especially at the stratified Windmiller mound (CA-SAC-107), suggested three temporally distinct cultural traditions: Early, Transitional, and Late. Information grew as a result of excavations at other mounds in the Delta and lower Sacramento Valley by Sacramento Junior College and the University of California, Berkeley.

Previous investigations in the project region have focused upon very detailed archival research of Spanish sources (Bennyhoff 1977), and the archeological investigations at a number of small sites (Schulz et al. 1979; Schulz and Simons 1973; Soule 1976). A reexamination of earlier work has also been undertaken (Ragir 1972; Schulz 1981; Doran 1980). Several of the previously investigated sites probably represent satellite encampments or small villages associated with major villages.

The majority of the sites appear to be relatively late in time, and probably represent Plains Miwok. As mentioned above, the sites appear to be satellite encampments or small villages. The activities

they practiced are varied, but detailed studies on the faunal collection suggest seasonality of occupation and a focus on fish species other than the main channel varieties.

Writing the definitive summary of California archeology, Moratto (1984: 529-547) devoted an entire chapter to linguistic prehistory. For the Central Valley region, Moratto points out that some Early Horizon and Middle Horizon central California archeological sites appear at least in part, contemporaneous, based on existing radiocarbon dates. Cultural materials recovered from CA-SJO-68, an Early Horizon site, are thought to relate to date to 4350±250 B.P or 2350 B.C. On the other hand, a Middle Horizon component at CA-CCO-308 dates to 4450±400 B.P. or 2450 B.C. The antiquity of other Early and Middle Horizon sites demonstrate an overlap of the two horizons by a millennium or more.

One explanation proposes that the Middle Horizon represents an intrusion of ancestral Miwok speaking people into the lower Cosumnes, Mokelumne, and Sacramento River areas from the Bay Area. The Early Horizon may represent older Yokuts settlements or perhaps the speakers of an Utian language who were somehow replaced by a shift of population(s) from the bay.

Ethnological Background

The Eastern Miwok represent one of the two main divisions of the Miwokan subgroup of the Utian language family (Levy 1978:398). The Plains Miwok, one of five separate cultural and linguistic groups of the Eastern Miwok, occupied the lower reaches of the Mokelumne, Cosumnes and Sacramento Rivers including the area of south Sacramento County surrounding the project area. Linguistic studies and the application of a lexicostatistic model for language divergence suggest that Plains Miwok was a distinct linguistic entity for the last 2000 years (Levy 1970). This result led researchers such as Richard Levy (1978:398) to conclude that the Plains Miwok inhabited the Sacramento Delta for a considerable period of time.

The political organization of the Plains Miwok centered on the tribelet. Tribelets were comprised of 300 to 500 individuals (Levy 1978:410). Each tribelet was thought to control a specific area of resources and usually consisted of several villages or hamlets. Each tribelet also was divided along lineages. These lineages were apparently localized to a specific geographic setting and most likely represented a village site and their associated satellite sites where the seasonal collection of resources occurred (Levy 1978:398-399). Descent was reckoned through males. Each settlement apparently contained roughly 21 individuals according to data collected by Gifford (Cook 1955:35).

The diet of the Plains Miwok emphasized the collection of floral resources such as acorns, buckeye, digger pine nuts, seeds from the native grasses and various fresh greens. Faunal resources such as tule elk, pronghorn antelope, deer, jackrabbits, cottontails, beaver, gray squirrels, woodrats, quail and waterfowl were hunted. Fishing, particularly salmon and sturgeon, contributed significantly to the Plains Miwok diet (Levy 1978:402-403). The primary method of collecting fish was by nets, but the use of bone hooks, harpoons and obsidian-tipped spears is also known ethnographically (Levy 1978:404)

Both twined and coiled basketry were manufactured by the Eastern Miwok. The uses of baskets included the collection and storage of seeds, basketry cradles and gaming (Levy 1978:406). Tule

mats were also known to have been used by the Plains Miwok primarily as a floor covering. Other uses of tule included the manufacture of the tule balsa, a water craft in which native people navigated and exploited adjacent delta and major river systems.

Four main types of structures were known among the Eastern Miwok, depending on the environmental setting. In the mountains, the primary structure was a conical structure of bark slabs. At lower elevations the structures consisted of thatched structures, semi-subterranean earth-covered dwellings and two types of assembly houses used for ceremonial purposes (Levy 1978:408-409).

Bennyhoff (1977:11) characterized the Plains Miwok as intensive hunter-gatherers, with an emphasis upon gathering. The seasonal availability of floral resources defined the limits of the group's economic pursuits. Hunting and fishing subsistence pursuits apparently accommodated the given distribution of resources. The Plains Miwok territory covered six seasonally productive biotic communities and as such native people could apparently afford to pick and choose the resources they ranked highest from each of these zones. The subsequent storage of floral resources (such as acorns in granaries) allowed for a more stable use of the resource base (Bennyhoff 1977:10). The acorn was apparently the subsistence base needed to provide an unusually productive environment as earlier non-acorn using peoples who resided in the same geographic setting apparently suffered some seasonal deprivation (Schulz 1981). Such an emphasis upon the gathering of acorns is consistent with the population increase evident during the Upper Emergent Period in California (Doran 1980).

The study of piscine (fish) remains from both CA-SAC-65 (Schulz et al. 1979) and CA-SAC-145 (Schulz n.d.; Schulz and Simons 1973) indicates that small villages away from the major rivers appear to concentrate on the collection of piscine species (particularly the Sacramento perch) that inhabited slow-moving waters.

Historical Background

The project area lies a few miles north of the Sheldon and Daylor grant (Rancho Omochumnes). Both men were assistants of John Sutter, with Jared Sheldon becoming a naturalized citizen of Mexico to obtain a land grant. Sheldon was awarded the grant in 1841, but this grant proved defective and another was issued in 1844 (Hoover, Rensch and Rensch 1970:288). William Daylor oversaw ranch operations as Sheldon pursued several other business ventures.

One of the ventures, a grist mill near Sloughouse, was the indirect cause of Sheldon's death in 1851. The dam that provided water to power the mill had been flooding out miners' claims on the Cosumnes River, so the miners demanded that Sheldon release the water. Sheldon refused, and built a small fort, installing a cannon to back up his refusal. The miners armed themselves and captured the fort. When Sheldon arrived with an armed party, a battle ensued in which Sheldon and two of his men were killed (Hoover, Rensch and Rensch 1970:290). Ironically, the dam washed out during a flood in the winter of the same year.

The name of Elk Grove was originally applied to a spot about a mile away from the eventual location of the town. James Hall built a hotel there in 1850 and named it after his home town in Missouri. This hotel burned down in 1857. The eventual site of Elk Grove was on the ranch of

Major James Buckner, who also built a hotel on the site in 1850. The hotel was owned successively by Buckner, Phineas Woodward, Mrs. Jared Erwin, and Nicholas Christophel (Davis 1890:243).

The site did not really become a town until after the railroad was constructed. A farmer named Everson saw potential commercial opportunities for a town at this location, but none of the residents, including Everson, had the money available to construct the necessary buildings. Everson persuaded the citizens to pool their money to form the Elk Grove Building Company in 1876. The profits from the first building, the Chittenden and Everson general merchandise store, fueled further construction which, in turn, brought in merchants from outside the area. Only four years later, the town boasted the original general store and one other, two hotels, a flouring mill, the railroad depot, a hardware store, a meat market, a furniture factory, two drug stores, a harness shop, a grain and hay warehouse, a dressmaking shop, two millinery shops, a boot shop, a wagon factory and a blacksmith (Thompson and West 1880:234). The town continued to grow, first as a commercial center for the farmers in the area and recently as a suburban residential zone for greater Sacramento.

RESEARCH

Records of previously recorded cultural resources and cultural resource investigations were examined by the North Central Information Center of the California Historical Resources Information System on November 12, 2014 (NCIC File No.: SAC-14-135, Appendix 2).

The project area had never been previously surveyed, and there are no resources recorded in the project area. The buildings currently present date to after 1980. For some reason, Elk Grove-Florin Road was recorded as a site in 1993, assigned CA-SAC-545H (P-34-700). Since it is a modern roadway, paved and widened beyond the original roadway, it is not a concern.

FIELD SURVEY

The property, APN 121-0140-013, is a 3.8 acre parcel lying on the northeast corner of the junction of Brown Road and Elk Grove - Florin Road. It is divided by a north-south fence into a western half that is devoid of almost all vegetation and an eastern half that is landscaped around the two buildings on the property. The grass had been recently cut at the time of the field inspection and ground visibility was excellent.

The project area was covered by linear transects spaced at ten meter intervals by Robert Gerry on November 5, 2014 (Figure 5). The only feature on the property other than the standing buildings was a pile of concrete rubble near the northeast corner of the property. This is clearly left over from construction of the shopping center that adjoins the property on the north. No sign of Native American occupation or use of the property was observed and no indications of Euro-American occupation prior to the modern day were present.

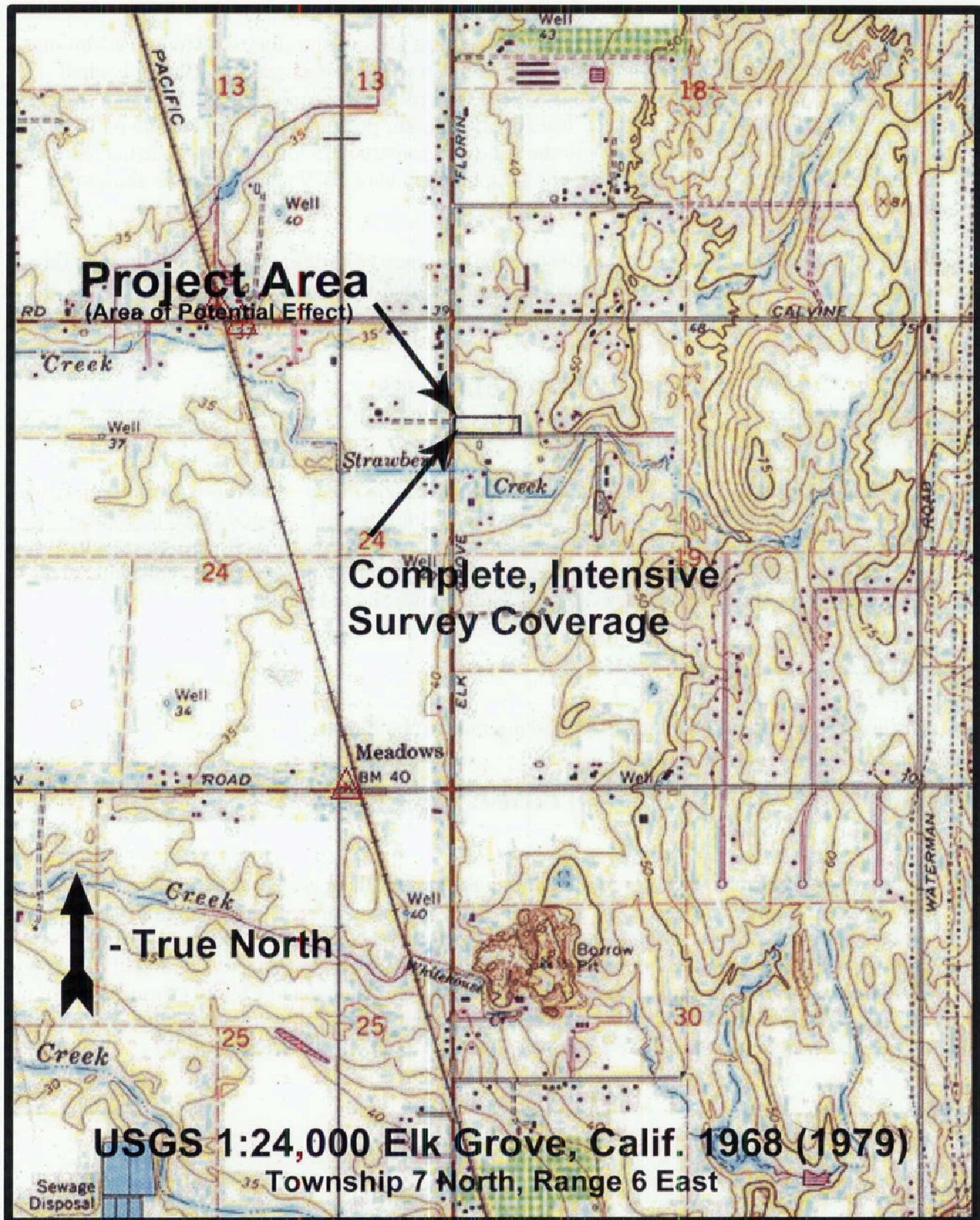


Figure 5

The residence on the property, 8945 Brown Road, is a narrow one story structure in a Minimal Traditional style. It is wood frame on a concrete slab with attached garage. Siding is vinyl wood-grained that looks like board-and-batten. The roof is a composite that looks like shingles. The windows are aluminum sliders. The county assessor places a construction date of 1972 on the building and this is consistent with the style and construction materials. The actual date may be later than that, since the Elk Grove topographic map with 1979 photorevisions shows no buildings present on the property.

To the east and a bit north of the residence is an even newer building that is all aluminum on a concrete slab. This appears to have housed a commercial venture at one time.

CONCLUSIONS

Prehistoric Period Resources

No evidence of prehistoric period resource has been found in or near the property. The Project site lies on a flat open plain, near a minor creek course. Campsites and villages would more likely be located near the larger, more reliable water sources such as the Cosumnes River. As a result, it is likely that the Native American inhabitants of the region used the Project site for collecting plant foods and for hunting, but such activities leave little physical evidence.

Historic Period Resources

The buildings present post-date 1979, and are modern buildings.

RECOMMENDATIONS

Although no prehistoric sites were found during the survey, there is a slight possibility that a site may exist and be totally obscured by vegetation, fill, or other historic activities, leaving no surface evidence. Should artifacts or unusual amounts of stone, bone, or shell be uncovered during construction activities, an archeologist should be consulted for on-the-spot evaluation of the finding. If the bone appears to be human, state law requires that the Sacramento County Coroner be contacted. If the Coroner determines that the bone is human and is most likely Native American in origin, he must contact the Native American Heritage Commission (916-322-7791).

BIBLIOGRAPHY

Armstrong, Lance

- 2007 *Echoes of Yesterday Elk Grove: An Inside View of Historic Sites*. Regent Press, Oakland.

Beardsley, Richard K.

- 1954 Temporal and Areal Relationships in Central California Archeology (parts 1 and 11). *University of California Archaeological Survey Reports* 24, 25. Berkeley.

Bennyhoff, James A.

- 1977 Ethnogeography of the Plains Miwok. *University of California, Davis Publications* 5. Davis.

Bennyhoff, James A. and Richard E. Hughes

- 1983 Shell Beads and Ornaments from Gatecliff Shelter, Nevada: Variability in Marine Shell Exchange in the Western Great Basin. *American Museum of Natural History Anthropological Papers* 59:290-296.

- 1984 Shell Beads and Ornament Exchange Networks between California and the Great Basin. In *The Archaeology of Monitor Valley, 5: Regional Synthesis and Implications*, by David H. Thomas. *Anthropological Papers of the American Museum of Natural History*. New York.

California Department of Parks and Recreation

- 1976 *California Inventory of Historical Resources*. Department of Parks and Recreation, Sacramento.

- 1990 *California Historic Landmarks*. Department of Parks and Recreation, Sacramento.

Cook, Sherburne F.

- 1955 The Epidemic of 1830-33 in California and Oregon. *University of California Publications in American Archaeology and Ethnology* 43(3): 303-326. Berkeley.

Davis, Winfield J.

- 1890 *An Illustrated History of Sacramento County, California*. Lewis Publishing Company, Chicago.

Doran, G.

- 1980 *Paleodemography of the Plains Miwok Ethnolinguistic Area, Central California*. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.

- Fredrickson, David A.
 1973 *Early Cultures of the North Coast Ranges, California*. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.
- Holmes, W.H.
 1902 Anthropological Studies in California. *Smithsonian Institution, Report of the U.S. National Museum for 1900*, pp.155-187. Washington, D.C.
- Levy, Richard S.
 1970 Miwok-Costanoan Lexicostatistics. Ms. in author's possession.
 1978 Eastern Miwok. In *California*, edited by Robert F. Heizer, pp. 398-413. Handbook of North American Indians, vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- Lillard, Jeremiah B., Robert F. Heizer and Franklin Fenenga
 1939 An Introduction to the Archaeology of Central California. *Sacramento Junior College, Department of Anthropology Bulletin 2*. Sacramento.
- Lillard, Jeremiah B. and William K. Purves
 1936 The Archeology of the Deer Creek-Cosumnes Area, Sacramento County, California. *Sacramento Junior College, Department of Anthropology Bulletin 1*. Sacramento.
- Moratto, Michael J.
 1984 *California Archaeology*. Academic Press, New York.
- Ragir, Sonia
 1972 The Early Horizon in Central California Prehistory. *University of California Research Contributions 15*. Berkeley.
- Schenck, W. Egbert and Elmer Dawson
 1929 Archeology of the Northern San Joaquin Valley. *University of California Publications in American Archeology and Ethnology 25(4):289-413*. Berkeley.
- Schultz, Peter D.
 1981 *Osteoarchaeology and Subsistence Change in Prehistoric Central California*. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.
- Schulz, Peter, D. Abels and Eric Ritter
 1979 Archeology of the Johnson Site (CA-Sac-65), Sacramento County, California. *California Department of Parks and Recreation, Archaeological Reports 18:1-31*.

Schulz, Peter and Dwight Simons

1973 Fish Species Diversity in a Prehistoric Central California Indian Midden. *California State Department of Fish and Game* 59(2):107-113. Sacramento.

Soule, William E.

1976 Archeological Excavations at CA-Sac-329 near Walnut Grove, Sacramento County, California. Ms. on file, North Central Information Center, California State University, Sacramento.

Thompson & West

1880 *History of Sacramento County, California*. Thompson & West, publishers, Oakland. Reprinted by Howell-North, Berkeley, 1960.

APPENDIX 1

Resumes

**PEAK & ASSOCIATES, INC.
RESUME**

MELINDA A. PEAK
Senior Historian/Archeologist
3941 Park Drive, Suite 20 #329
El Dorado Hills, CA 95762
(916) 939-2405

January 2014

PROFESSIONAL EXPERIENCE

Ms. Peak has served as the principal investigator on a wide range of prehistoric and historic excavations throughout California. She has directed laboratory analyses of archeological materials, including the historic period. She has also conducted a wide variety of cultural resource assessments in California, including documentary research, field survey, Native American consultation and report preparation.

In addition, Ms. Peak has developed a second field of expertise in applied history, specializing in site-specific research for historic period resources. She is a registered professional historian and has completed a number of historical research projects for a wide variety of site types.

Through her education and experience, Ms. Peak meets the Secretary of Interior Standards for historian, architectural historian, prehistoric archeologist and historic archeologist.

EDUCATION

M.A. - History - California State University, Sacramento, 1989
Thesis: *The Bellevue Mine: A Historical Resources Management Site Study in Plumas and Sierra Counties, California*
B.A. - Anthropology - University of California, Berkeley

RECENT PROJECTS

Ms. Peak completed the cultural resource research and contributed to the text prepared for the DeSabra-Centerville PAD for the initial stage of the FERC relicensing. She also served cultural resource project manager for the FERC relicensing of the Beardsley-Donnells Project. For the South Feather Power Project and the Woodleaf-Palermo and Sly Creek Transmission Lines, her team completing the technical work for the project.

In recent months, Ms. Peak has completed several determinations of eligibility and effect documents in coordination with the Corps of Engineers for projects requiring federal permits, assessing the eligibility of a number of sites for the National Register of Historic Places. She has also completed historical research projects on a wide variety of topics for a number of projects including the development of navigation and landings on the Napa River, farmhouses dating to the 1860s, bridges, an early roadhouse, Folsom Dam and a section of an electric railway line. In recent

years, Ms. Peak has prepared a number of cultural resource overviews and predictive models for blocks of land proposed for future development for general and specific plans. She has been able to direct a number of surveys of these areas, allowing the model to be tested.

She served as principal investigator for the multi-phase Twelve Bridges Golf Club project in Placer County. She served as liaison with the various agencies, helped prepare the historic properties treatment plan, managed the various phases of test and data recovery excavations, and completed the final report on the analysis of the test phase excavations of a number of prehistoric sites. She is currently involved as the principal investigator for the Clover Valley Lakes project adjacent to Twelve Bridges in the City of Rocklin, coordinating contacts with Native Americans, the Corps of Engineers and the Office of Historic Preservation.

Ms. Peak has served as project manager for a number of major survey and excavation projects in recent years, including the many surveys and site definition excavations for the 172-mile-long Pacific Pipeline proposed for construction in Santa Barbara, Ventura and Los Angeles counties. She also completed an archival study in the City of Los Angeles for the project. She also served as principal investigator for a major coaxial cable removal project for AT&T.

Additionally, she completed a number of small surveys, served as a construction monitor at several urban sites, and conducted emergency recovery excavations for sites found during monitoring. She has directed the excavations of several historic complexes in Sacramento, Placer and El Dorado Counties.

Ms. Peak is the author of a chapter and two sections of a published history (1999) of Sacramento County, *Sacramento: Gold Rush Legacy, Metropolitan Legacy*. She served as the consultant for a children's book on California, published by Capstone Press in 2003 in the land of Liberty series.

PEAK & ASSOCIATES, INC.
RESUME

ROBERT A. GERRY

January 2014

Senior Archeologist

3941 Park Drive, Suite 20, #329

El Dorado Hills, CA 95762

(916) 939-2405

PROFESSIONAL EXPERIENCE

Mr. Gerry has forty years of extensive experience in both the public and private sectors. He has directed all types of cultural resource-related projects, including field survey, test excavations, data recovery programs, intensive archival research, cultural resource management and monitoring. He has completed archeological work in most cultural areas of California and in the western Great Basin.

EDUCATION

Graduate studies - Anthropology - California State University, Sacramento

B.A. - Anthropology - University of Illinois, Chicago Circle

RECENT PROJECTS

Mr. Gerry was field director for a cultural resources survey of the Diamond Valley Project in Alpine County, California. The project involved an overview and survey of an extensive plan area, recording and evaluation of resources and presenting the results to local Native Americans and helping to conduct a field tour with them. He also directed field survey of the Van Vleck Ranch, a large property in Sacramento County being put into a conservation easement. He has conducted surveys throughout California related to low income housing development.

He was field director and primary report writer on several linear surveys of considerable length--including the San Joaquin Valley Pipeline (157 miles) for Shell Oil, the Point Arena-Dunnigan fiber optic cable (137 miles) and the Medford, Oregon, to Redding, California fiber optic cable (151 miles), the Oregon and Idaho portions of the Spokane to Boise fiber optic cable, and the San Bernardino to San Diego fiber optic cable, for American Telephone & Telegraph Company. He also assisted on the 170 mile Pacific Pipeline survey on the southern coast of California and conducted several surveys of water pipelines in Riverside County for Eastern Municipal Water District: La Sierra pipeline, Perris Valley, Pico Rivera, Temecula, San Jacinto and their entire recycled water project. Follow-up projects involved well sites, pump stations and other infrastructure improvements.

Mr. Gerry supervised the cultural resources assessments and participated in all field surveys for the studies of water supply facilities for seven wildlife refuges in the Sacramento and San Joaquin Valleys. He has also developed a specialty in bridge replacement evaluations, completing five such studies in Tuolumne County, two in Santa Barbara County, two in Amador County and ten others in various areas of California.

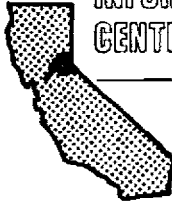
Mr. Gerry has had extensive experience in the recording and evaluation of mining sites in northern California and Nevada for proposed mining undertakings as well as in the course of survey for proposed subdivisions, reservoirs, and other development projects.

Mr. Gerry has directed test excavations for evaluation of significance at a number of sites, both historic and prehistoric. Examples include CA-NAP-261, twelve sites on Naval Petroleum Reserve No. 1, three sites on Russell Ranch in Sacramento County, a midden site near Guinda and a village known through ethnographic literature in Murphys. He conducted test excavations at a known village site adjacent to a quarry in Yolo County to insure it would not be impacted by expanded quarrying.

In the field of historical resources, Mr. Gerry has prepared site records and significance evaluations for numerous historical buildings throughout California. The bulk of these have been single family residences, but industrial, commercial and multi-family residences were also included. He has also directed excavations for evaluation of historical archeological potential and monitored construction work in areas of known historical sensitivity.

APPENDIX 2

Records Search



11/12/2014

NCIC File No.: SAC-14-135

Robert A Gerry
Peak & Associates
3941 Park Drive, Suite 20-329
El Dorado Hills, CA 95762

Re: 99 Cent Only Store

The North Central Information Center received your record search request for the project area referenced above, located on the Elk Grove USGS 7.5' quad. The following reflects the results of the records search for the project area and a 1/8-mile radius:

As indicated on the data request form, the locations of resources are provided in the following format:

custom GIS maps shapefiles hand-drawn maps

Resources within search area:	P-34-700
Reports within search area:	none

- Resource Database Printout (list):** enclosed not requested nothing listed
- Resource Database Printout (details):** enclosed not requested nothing listed
- Resource Digital Database Records:** enclosed not requested nothing listed
- Report Database Printout (list):** enclosed not requested nothing listed
- Report Database Printout (details):** enclosed not requested nothing listed
- Report Digital Database Records:** enclosed not requested nothing listed
- Resource Record Copies:** enclosed not requested nothing listed
- Report Copies:** enclosed not requested nothing listed

- OHP Historic Properties Directory:** enclosed not requested nothing listed
- Archaeological Determinations of Eligibility:** enclosed not requested nothing listed
- CA Inventory of Historic Resources (1976):** enclosed not requested nothing listed
- Caltrans Bridge Survey:** enclosed not requested nothing listed
- Ethnographic Information:** enclosed not requested nothing listed
- Historical Literature:** enclosed not requested nothing listed
- Historical Maps:** enclosed not requested nothing listed
- Local Inventories:** enclosed not requested nothing listed
- GLO and/or Rancho Plat Maps:** enclosed not requested nothing listed
- Shipwreck Inventory:** enclosed not requested nothing listed
- Soil Survey Maps:** enclosed not requested nothing listed

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

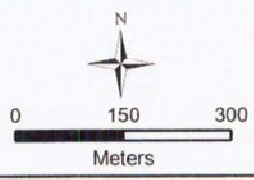
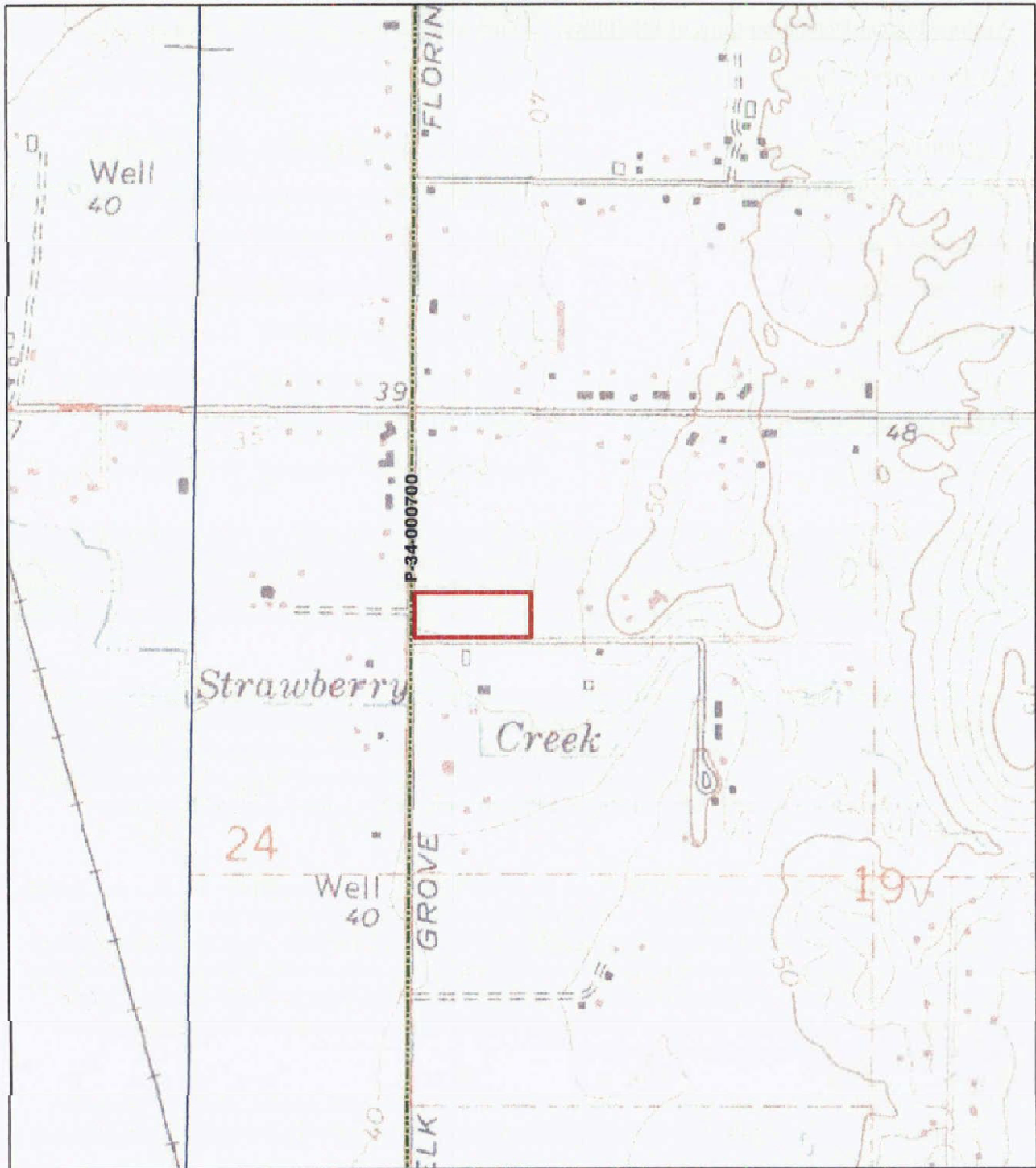
Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Sincerely,

Nathan Hallam
Coordinator, North Central Information Center

99 Cent Only Store



North Central Information Center
Records Search Results
Elk Grove 7.5' Quadrangle

May depict confidential cultural resource locations.
Do not redistribute.

Findings:
1 resources
0 survey reports

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-34-000700	CA-SAC-000545H	Resource Name - Elk Grove-Fibrin Road; Other - CRU-93-SAC-21H	Site	Historic	AH07 (Roads/trails/railroad grades)	1993 (Eleanor Derr, Rick Derr, Cultural Resources Unlimited); 2005 (MR Bowen, Jones and Stokes)	002977, 009989

D. GREENHOUSE GASES

99 Cent Store
Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	109.00	Space	0.98	43,600.00	0
Free-Standing Discount Store	20.03	1000sqft	0.46	20,029.00	0

1.2 Other Project Characteristics

Urbanization Urban Wind Speed (m/s) 3.5 Precipitation Freq (Days) 58
 Climate Zone 6 Operational Year 2016

Utility Company Sacramento Municipal Utility District

CO2 Intensity (lb/MW/hr) 590.31 CH4 Intensity (lb/MW/hr) 0.029 N2O Intensity (lb/MW/hr) 0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - Project site = 3.48 acres total

Vehicle Trips - Trip generation per Initial Study Subsection 16

Construction Off-road Equipment Mitigation - Tier 3 engine mitigation

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	PhaseEndDate	8/18/2016	11/12/2015
tblConstructionPhase	PhaseEndDate	8/18/2016	11/12/2015
tblConstructionPhase	PhaseStartDate	11/13/2015	2/6/2015
tblConstructionPhase	PhaseStartDate	11/13/2015	2/6/2015
tblGrading	AcresOfGrading	1.50	2.48

tblLandUse	LandUseSquareFeet	20,030.00	20,029.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	ST_TR	71.07	44.68
tblVehicleTrips	SU_TR	56.36	44.68
tblVehicleTrips	WD_TR	57.24	44.68

2.0 Emissions Summary

**2.2 Overall Operational
Unmitigated Operational**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
	tons/yr										MT/yr						
Area	0.2635	2.0000e-005	1.6900e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	3.2000e-003	3.2000e-003	1.0000e-005	0.0000	0.0000	3.3900e-003
Energy	6.1000e-004	5.5500e-003	4.6600e-003	3.0000e-005	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	0.0600	85.8700	85.8700	4.0400e-003	9.2000e-004	0.0000	86.2406
Mobile	0.5127	0.7708	4.0914	6.0100e-003	0.4050	9.4600e-003	0.4144	0.1085	8.6400e-003	0.1171	0.0000	472.0665	472.0665	0.0230	0.0000	0.0000	472.5504
Waste						0.0000	0.0000		0.0000	0.0000	17.4856	0.0000	17.4856	1.0334	0.0000	0.0000	39.1865
Water						0.0000	0.0000		0.0000	0.0000	0.5249	2.8316	3.3566	1.9500e-003	1.1700e-003	0.0000	3.7602
Total	0.7769	0.7763	4.0978	6.0400e-003	0.4050	9.8300e-003	0.4148	0.1085	9.0700e-003	0.1176	18.0106	560.7713	578.7818	1.0624	2.0900e-003	0.0000	601.7410

2.2 Overall Operational

Mitigated Operational

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	0.2635	2.0000e-005	1.8900e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	3.2000e-003	3.2000e-003	1.0000e-005	0.0000	3.3900e-003
Energy	5.3000e-004	4.8500e-003	4.0800e-003	3.0000e-005	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	0.0000	81.9115	81.9115	3.8700e-003	8.8000e-004	82.2642
Mobile	0.5127	0.7708	4.0914	6.0100e-003	0.4050	9.4000e-003	0.4144	0.1085	8.6400e-003	0.1171	0.0000	472.0665	472.0665	0.0230	0.0000	472.5504
Waste						0.0000	0.0000	0.0000	0.0000	0.0000	17.4856	0.0000	17.4856	1.0334	0.0000	39.1865
Water						0.0000	0.0000	0.0000	0.0000	0.0000	0.5249	2.7797	3.3046	1.9500e-003	1.1700e-003	3.7086
Total	0.7768	0.7756	4.0972	6.0400e-003	0.4050	9.7800e-003	0.4148	0.1085	9.0200e-003	0.1175	18.0106	556.7609	574.7714	1.0622	2.0500e-003	597.7130

Percent Reduction	Construction Phase										Construction Phase					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
0.01		0.09	0.01	0.00	0.00	0.51	0.01	0.00	0.55	0.04	0.00	0.72	0.69	0.02	1.91	0.67

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/30/2015	5	2	
2	Grading	Grading	1/31/2015	2/5/2015	5	4	
3	Building Construction	Building Construction	2/6/2015	11/12/2015	5	200	
4	Paving	Paving	2/6/2015	11/12/2015	5	200	
5	Architectural Coating	Architectural Coating	2/6/2015	11/12/2015	5	200	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 2.48

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 32,006; Non-Residential Outdoor: 10,669 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	25.00	10.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

Category	tons/yr											MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5400e-003	0.0269	0.0170	2.0000e-005	1.4700e-003	1.4700e-003	1.4700e-003	1.3500e-003	1.3500e-003	1.3500e-003	0.0000	1.6345	1.6345	4.9000e-004	0.0000	1.6448	1.6448
Total	2.5400e-003	0.0269	0.0170	2.0000e-005	5.8000e-003	1.4700e-003	7.2700e-003	2.9500e-003	1.3500e-003	4.3000e-003	0.0000	1.6345	1.6345	4.9000e-004	0.0000	1.6448	1.6448

Unmitigated Construction Off-Site

Category	tons/yr											MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	3.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0544	0.0544	0.0000	0.0000	0.0545	0.0545
Total	3.0000e-005	4.0000e-005	3.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0544	0.0544	0.0000	0.0000	0.0545	0.0545

3.2 Site Preparation - 2015

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
toms/yr																
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2000e-004	8.3100e-003	0.0111	2.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.0000	1.6345	1.6345	4.9000e-004	0.0000	1.6448
Total	4.2000e-004	8.3100e-003	0.0111	2.0000e-005	5.8000e-003	4.0000e-004	6.2000e-003	2.9500e-003	4.0000e-004	3.3500e-003	0.0000	1.6345	1.6345	4.9000e-004	0.0000	1.6448
MT/yr																

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
toms/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	3.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0544	0.0544	0.0000	0.0000	0.0545
Total	3.0000e-005	4.0000e-005	3.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0544	0.0544	0.0000	0.0000	0.0545
MT/yr																

3.3 Grading - 2015

Unmitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0104	0.0000	0.0104	5.1100e-003	0.0000	5.1100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1300e-003	0.0439	0.0282	3.0000e-005	2.3900e-003	2.3900e-003	2.3900e-003	2.2000e-003	2.2000e-003	2.2000e-003	0.0000	2.6849	2.6849	8.0000e-004	0.0000	2.7017
Total	4.1300e-003	0.0439	0.0282	3.0000e-005	0.0104	2.3900e-003	0.0127	5.1100e-003	2.2000e-003	7.3100e-003	0.0000	2.6849	2.6849	8.0000e-004	0.0000	2.7017

Unmitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	7.0000e-005	7.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	1.0000e-005	0.0000	0.1090
Total	6.0000e-005	7.0000e-005	7.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	1.0000e-005	0.0000	0.1090

3.3 Grading - 2015

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Fugitive Dust					0.0104	0.0000	0.0104	5.1100e-003	0.0000	5.1100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	0.0137	0.0181	3.0000e-005	6.6000e-004	6.6000e-004	6.6000e-004	6.6000e-004	6.6000e-004	6.6000e-004	0.0000	2.6849	2.6849	8.0000e-004	0.0000	2.7017
Total	6.8000e-004	0.0137	0.0181	3.0000e-005	0.0104	6.6000e-004	0.0110	5.1100e-003	6.6000e-004	5.7700e-003	0.0000	2.6849	2.6849	8.0000e-004	0.0000	2.7017
MT/yr																

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	7.0000e-005	7.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	1.0000e-005	0.0000	0.1090
Total	6.0000e-005	7.0000e-005	7.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	1.0000e-005	0.0000	0.1090
MT/yr																

3.4 Building Construction - 2015
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
Off-Road	0.3600	2.1564	1.5004	2.2000e-003		0.1485	0.1485		0.1434	0.1434	0.0000	186.4831	186.4831	0.0430	0.0000	187.3864
Total	0.3600	2.1564	1.5004	2.2000e-003		0.1485	0.1485		0.1434	0.1434	0.0000	186.4831	186.4831	0.0430	0.0000	187.3864

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0160	0.0970	0.1838	2.1000e-004	5.7000e-003	1.5800e-003	7.2900e-003	1.6300e-003	1.4500e-003	3.0800e-003	0.0000	19.1235	19.1235	1.7000e-004	0.0000	19.1270
Worker	9.4000e-003	0.0112	0.1175	2.2000e-004	0.0184	1.5000e-004	0.0185	4.8800e-003	1.3000e-004	5.0200e-003	0.0000	17.0096	17.0096	9.6000e-004	0.0000	17.0289
Total	0.0254	0.1082	0.3013	4.3000e-004	0.0241	1.7300e-003	0.0258	6.5100e-003	1.5800e-003	8.1000e-003	0.0000	36.1331	36.1331	1.1300e-003	0.0000	36.1569

3.4 Building Construction - 2015
Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.2199	1.2561	1.5030	2.2000e-003		0.0894	0.0894		0.0894	0.0894	0.0000	186.4829	186.4829	0.0430	0.0000	187.3862
Total	0.2199	1.2561	1.5030	2.2000e-003		0.0894	0.0894		0.0894	0.0894	0.0000	186.4829	186.4829	0.0430	0.0000	187.3862

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0160	0.0970	0.1838	2.1000e-004	5.7000e-003	1.5800e-003	7.2900e-003	1.6300e-003	1.4500e-003	3.0800e-003	0.0000	19.1235	19.1235	1.7000e-004	0.0000	19.1270
Worker	9.4000e-003	0.0112	0.1175	2.2000e-004	0.0184	1.5000e-004	0.0185	4.8800e-003	1.3000e-004	5.0200e-003	0.0000	17.0096	17.0096	9.6000e-004	0.0000	17.0299
Total	0.0254	0.1082	0.3013	4.3000e-004	0.0241	1.7300e-003	0.0258	6.5100e-003	1.5800e-003	8.1000e-003	0.0000	36.1331	36.1331	1.1300e-003	0.0000	36.1569

3.5 Paving - 2015

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.1404	1.4596	0.9170	1.3300e-003	0.0892	0.0892	0.0892	0.0822	0.0822	0.0822	0.0000	125.4156	125.4156	0.0368	0.0000	126.1878
Paving	1.2800e-003				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1417	1.4596	0.9170	1.3300e-003	0.0892	0.0892	0.0892	0.0822	0.0822	0.0822	0.0000	125.4156	125.4156	0.0368	0.0000	126.1878

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8900e-003	5.8400e-003	0.0611	1.1000e-004	9.5500e-003	8.0000e-005	9.6200e-003	2.5400e-003	7.0000e-005	2.6100e-003	0.0000	8.8450	8.8450	5.0000e-004	0.0000	8.8555
Total	4.8900e-003	5.8400e-003	0.0611	1.1000e-004	9.5500e-003	8.0000e-005	9.6200e-003	2.5400e-003	7.0000e-005	2.6100e-003	0.0000	8.8450	8.8450	5.0000e-004	0.0000	8.8555

3.5 Paving - 2015

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0315	0.6546	0.9701	1.3300e-003		0.0382	0.0382		0.0382	0.0382	0.0000	125.4154	125.4154	0.0368	0.0000	126.1877
Paving	1.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0327	0.6546	0.9701	1.3300e-003		0.0382	0.0382		0.0382	0.0382	0.0000	125.4154	125.4154	0.0368	0.0000	126.1877

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8900e-003	5.8400e-003	0.0611	1.1000e-004	9.5500e-003	8.0000e-005	9.6200e-003	2.5400e-003	7.0000e-005	2.6100e-003	0.0000	8.8450	8.8450	5.0000e-004	0.0000	8.8555
Total	4.8900e-003	5.8400e-003	0.0611	1.1000e-004	9.5500e-003	8.0000e-005	9.6200e-003	2.5400e-003	7.0000e-005	2.6100e-003	0.0000	8.8450	8.8450	5.0000e-004	0.0000	8.8555

3.6 Architectural Coating - 2015
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Archit. Coating	0.1484				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0407	0.2570	0.1902	3.0000e-004	0.0221	0.0221	0.0221	0.0221	0.0221	0.0221	0.0000	25.5325	25.5325	3.3200e-003	0.0000	25.6024
Total	0.1890	0.2570	0.1902	3.0000e-004	0.0221	0.0221	0.0221	0.0221	0.0221	0.0221	0.0000	25.5325	25.5325	3.3200e-003	0.0000	25.6024
MT/yr																

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	2.2500e-003	0.0235	4.0000e-005	3.6700e-003	3.0000e-005	3.7000e-003	9.8000e-004	3.0000e-005	1.0000e-003	0.0000	3.4019	3.4019	1.9000e-004	0.0000	3.4060
Total	1.8800e-003	2.2500e-003	0.0235	4.0000e-005	3.6700e-003	3.0000e-005	3.7000e-003	9.8000e-004	3.0000e-005	1.0000e-003	0.0000	3.4019	3.4019	1.9000e-004	0.0000	3.4060
MT/yr																

3.6 Architectural Coating - 2015
Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	0.1484					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0407	0.2570	0.1902	3.0000e-004		0.0221	0.0221	0.0221	0.0221	0.0221	0.0000	25.5325	25.5325	3.3200e-003	0.0000	25.6023
Total	0.1890	0.2570	0.1902	3.0000e-004		0.0221	0.0221	0.0221	0.0221	0.0221	0.0000	25.5325	25.5325	3.3200e-003	0.0000	25.6023

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	2.2500e-003	0.0235	4.0000e-005	3.6700e-003	3.0000e-005	3.7000e-003	9.8000e-004	3.0000e-005	1.0000e-003	0.0000	3.4019	3.4019	1.9000e-004	0.0000	3.4060
Total	1.8800e-003	2.2500e-003	0.0235	4.0000e-005	3.6700e-003	3.0000e-005	3.7000e-003	9.8000e-004	3.0000e-005	1.0000e-003	0.0000	3.4019	3.4019	1.9000e-004	0.0000	3.4060

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	tons/yr													MT/yr			
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Mitigated	0.5127	0.7708	4.0914	6.0100e-003	0.4050	9.4000e-003	0.4144	0.1065	8.6400e-003	0.1171	0.0000	472.0665	472.0665	0.0230	0.0000	472.5504	
Unmitigated	0.5127	0.7708	4.0914	6.0100e-003	0.4050	9.4000e-003	0.4144	0.1065	8.6400e-003	0.1171	0.0000	472.0665	472.0665	0.0230	0.0000	472.5504	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT		
Free-Standing Discount Store	894.94	894.94	894.94	1,088,133	1,088,133		
Parking Lot	0.00	0.00	0.00				
Total	894.94	894.94	894.94	1,088,133	1,088,133		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Free-Standing Discount Store	10.00	5.00	6.50	12.20	68.80	19.00	47.5	35.5	17
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504516	0.068219	0.178179	0.147873	0.044976	0.006346	0.020386	0.015946	0.002304	0.002308	0.006193	0.000574	0.002181

6.0 Electricity Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Electricity Mitigated					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	76.6294	76.6294	3.7600e-003	7.8000e-004	76.9499
Electricity Unmitigated					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	79.8311	79.8311	3.9200e-003	8.1000e-004	80.1650
Natural Gas Mitigated	5.3000e-004	4.8500e-003	4.0800e-003	3.0000e-005	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	0.0000	5.2821	5.2821	1.0000e-004	1.0000e-004	5.3143
Natural Gas Unmitigated	6.1000e-004	5.5500e-003	4.6600e-003	3.0000e-005	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	0.0000	6.0389	6.0389	1.2000e-004	1.1000e-004	6.0756

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use KBTU/yr	tons/yr										MT/yr					
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Free-Standing Discount Store	113164	6.1000e-004	5.5500e-003	4.6600e-003	3.0000e-005	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	0.0000	6.0389	6.0389	1.2000e-004	1.1000e-004	6.0756
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		6.1000e-004	5.5500e-003	4.6600e-003	3.0000e-005	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	4.2000e-004	0.0000	6.0389	6.0389	1.2000e-004	1.1000e-004	6.0756

Mitigated

Land Use	NaturalGas Use KBTU/yr	tons/yr										MT/yr					
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Free-Standing Discount Store	98983.3	5.3000e-004	4.8500e-003	4.0800e-003	3.0000e-005	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	0.0000	5.2821	5.2821	1.0000e-004	1.0000e-004	5.3143
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		5.3000e-004	4.8500e-003	4.0800e-003	3.0000e-005	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	3.7000e-004	0.0000	5.2821	5.2821	1.0000e-004	1.0000e-004	5.3143

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Mitigated	0.2635	2.0000e-005	1.6900e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	3.2000e-003	3.2000e-003	1.0000e-005	0.0000	3.3900e-003
Unmitigated	0.2635	2.0000e-005	1.6900e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	3.2000e-003	3.2000e-003	1.0000e-005	0.0000	3.3900e-003
MT/yr																

6.2 Area by SubCategory

Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Architectural Coating	0.0148					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2485					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.6900e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	3.2000e-003	3.2000e-003	1.0000e-005	0.0000	3.3900e-003
Total	0.2635	2.0000e-005	1.6900e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	3.2000e-003	3.2000e-003	1.0000e-005	0.0000	3.3900e-003
MT/yr																

6.2 Area by SubCategory

Mitigated

SubCategory	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Architectural Coating	0.0148					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2485					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.6900e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	3.2000e-003	3.2000e-003	1.0000e-005	0.0000	0.0000	3.3900e-003
Total	0.2635	2.0000e-005	1.6900e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	3.2000e-003	3.2000e-003	1.0000e-005	0.0000	0.0000	3.3900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

Category	MT/yr				
	Total CO2	CH4	N2O	CO2e	
Mitigated	3.3046	1.9500e-003	1.1700e-003	3.7086	
Unmitigated	3.3566	1.9500e-003	1.1700e-003	3.7602	

7.2 Water by Land Use

Unmitigated

Land Use	Indoor/Outdoor Use	Mgal	MTr/yr			
			Total CO2	CH4	N2O	CO2e
Free-Standing Discount Store	1.48367 / 0.909348		3.3566	1.9500e-003	1.1700e-003	3.7602
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Total			3.3566	1.9500e-003	1.1700e-003	3.7602

Mitigated

Land Use	Indoor/Outdoor Use	Mgal	MTr/yr			
			Total CO2	CH4	N2O	CO2e
Free-Standing Discount Store	1.48367 / 0.853878		3.3045	1.9500e-003	1.1700e-003	3.7086
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Total			3.3045	1.9500e-003	1.1700e-003	3.7086

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	17.4856	1.0334	0.0000	39.1865
Unmitigated	17.4856	1.0334	0.0000	39.1865

8.2 Waste by Land Use

Unmitigated

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
		MT/yr			
Free-Standing Discount Store	86.14	17.4856	1.0334	0.0000	39.1865
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		17.4856	1.0334	0.0000	39.1865

8.2 Waste by Land Use

Mitigated

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
		MT/yr			
Free-Standing Discount Store	86.14	17.4856	1.0334	0.0000	39.1865
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		17.4856	1.0334	0.0000	39.1865

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

E. GEOTECHNICAL



Korbmacher Engineering, Inc.

Geotechnical Environmental Material Testing Special Inspection

480 Preston Court, Suite B, Livermore, CA 94551, PO Box 405, Livermore, CA 94551 925.454.9033, 925.454.9564 (Fax)

14 June 2014

Mr. Chase Jiannalone
99¢ Only Stores
5500 S. Eastern Avenue, Suite 110
Commerce, California 90040

Subject:

GEOTECHNICAL STUDY
99¢ Only Store
NEC Elk Grove Florin Road and Brown Road
Elk Grove, California
Project No. 1428

Dear Mr. Jiannalone:

Korbmacher Engineering, Inc. has completed the geotechnical study for the proposed project to be located in the City of Elk Grove, California. The results of the study are attached, including the plot plan, laboratory test results, boring logs, and geotechnical recommendations.

We appreciate being of service to you in the geotechnical study phase of this project. If design conditions change, or if you have questions concerning this report or any of our testing, design and consulting services, please do not hesitate to contact us. We look forward to working with you on future projects.

Respectfully submitted,
KORBMACHER ENGINEERING, INC.

Bruno Korbmacher, PE

Copies: Addressee (1 email)

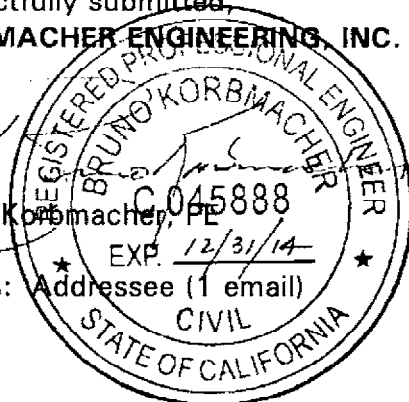


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Appendix A - Corrosivity Analysis

1.0 INTRODUCTION

This report presents the results of a geotechnical study performed at the subject site for the proposed new retail building. The project is located at northeast corner of Florin Road and Brown Road in the City of Elk Grove, California, as shown on the Vicinity Map, Figure 1.

1.1 Purpose

The purpose of this study was to evaluate the soil and geologic characteristics relevant to the design of the proposed development. General soil and foundation engineering design and recommendations are provided based on the physical characteristics of the subsurface materials and the geotechnical limitations created by the site's surface features.

1.2 Proposed Project Development

We understand the proposed projects will consist of construction a new retail building. The construction may consist of concrete slab-on-grade floor with wood-frame structure. Maximum structural wall loads are anticipated to be about 2,000 pounds per lineal foot. Site grading is anticipated to be minimal for preparation of the building pad, site drainage, and parking and drive improvements. If from the information that we provided above is incorrect, please contact Korbmacher Engineering, Inc. (KEI).

Please contact our office if the conditions of the project change. We may need to revise our recommendations if changes occur in the project's configuration, the type of construction, or the proposed loads.

1.3 Scope of Services

The scope of work for the proposed development included the following:

- Reviewing project documents provided by the client,
- Exploring the subsurface soil conditions with seven exploratory borings,
- Sampling and performing laboratory testing of soil obtained from borings,
- Analyzing the soil data compiled during the exploration, and
- Reporting our findings and providing recommendations for site development.

This study does not include an environmental assessment or investigation for the presence or absence of hazardous or toxic material in structures, soil, surface water, groundwater, or air on, below or around the project site.

2.0 SITE EXPLORATION AND LABORATORY TESTING

2.1 Site Exploration

The subsurface conditions of the site were explored on 13 May January 2014. The exploration consisted of drilling seven exploratory borings to a maximum depth of about 30½ feet below the existing site grade. The boring locations drilled at the project site are shown in Figures 2 and 3, Boring Location Map. The borings were drilled using a truck-mounted, CME 45 drilling rig.

Soils encountered during drilling were logged and samples were obtained to aid in material classification and for laboratory testing. Soil samples were recovered in either a 3-inch or 2.5-inch outside diameter (OD) California sampler or a Standard Penetration Sampler driven by a 140-pound hammer free-falling 30 inches. The number of blows applied to advance the sampler was recorded for each 6 inches of penetration. Blow counts from the bottom 12 inches of penetration were recorded on the log as blows per foot and recorded on the boring log.

Figure 4, Boring Log Legend, illustrates the Unified Soil Classification System which was used to identify subsurface soil during drilling. The log describing the material encountered in the borings was recorded in the field by our representative and are shown on Figures 5 through 12.

2.2 Laboratory Testing

Laboratory testing was conducted on selected samples to obtain data on density, moisture content, and classification of the soil. Test results are shown on the Boring Logs.

Atterberg limits testing was performed on samples of the subsurface soil. The tests were performed according to American Society for Testing and Materials (ASTM) test methods and procedures. The test results indicate a low expansion potential. The test results are shown on the Boring Logs and in Figure 13, Plasticity Chart.

A moisture/density relationship curve (compaction curve) was performed on a representative a bulk sample of the probable subgrade soils. The compaction test was performed according to ASTM D-1557 test methods and procedures. The test results are shown in Figure 14, Moisture/Density Relationship.

A resistance value (R-Value) test was performed on a representative a bulk sample of the probable pavement subgrade soils. The R-Value test was performed according to California Department of Transportation (Caltrans) test methods. The test results indicate an R-Value of 56 as shown in Figure 15, Resistance Value (R-Value).

Corrosivity Analysis was performed on a sample of the near surface soil. The tests were performed according to American Society for Testing and Materials (ASTM) test methods and procedures. The test results indicate the soil is “moderately corrosive” to buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron base on resistivity measurements. The test results and brief evaluation is presented in Appendix A - Corrosivity Analysis.

3.0 SUBSURFACE CONDITIONS

3.1 Surface

At the time of our field exploration, the subject site was observed to be an existing vacant field for the western portion of the property and a private residence for the eastern end of the property as shown in Figures 2 and 3, Boring Location Maps and as shown in Figures 16 and 17, Photographs of Project Site.

3.2 Subsurface

We did not observe any material that would indicate that the surface soils were fill. There may be varying depths of fill in areas beyond or between our exploratory borings.

In general, the native soils consisted of stiff to hard silty clay, clayey silt and very dense silty gravel. Laboratory testing indicates that the near surface soils have a low expansion potential. The test results are presented in Figure 13, Plasticity Chart.

Groundwater was not observed in the borings at the time of backfilling the boring. We expect groundwater levels to fluctuate due to variations in rainfall, groundwater recharge, and site conditions. All borings were backfilled with soil cuttings.

4.0 SEISMIC/GEOLOGIC/LIQUEFACTION CONSIDERATIONS

4.1 Seismic

Geologic references indicate that no fault trace designated active or potentially active passes through the subject property. Table 1, on the next page, lists the distance from the fault, the maximum moment magnitude, the slip rate, and fault type for local faults. The *Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada*, Uniform Building Code (1997 edition), Figure 16-3, Seismic Zone Map of the United States, was used solely to illustrate the distance between the subject fault zones and the subject site. Seismic design criteria is discussed in a later section of this report.

Fault	Distance ¹ (km)	ME ²	Slip Rate ² (mm/yr)	Fault Type ¹
Greenville	73	6.9	2.00	B
Concord-Green Valley	79	6.9	6.00	B

1. CDMG, Maps of Known Active Fault, Near-Source Zones in California and Adjacent Portions of Nevada, 1997.
 2. CDMG, Probabilistic Seismic Hazard Assessment for the State of California, 1996.

4.2 Geotechnical Hazards

Risk of geotechnical hazards will always exist due to uncertainties of geologic conditions and the unpredictability of seismic activity in the area. However, in our opinion, based on available data, there are no indications of geotechnical hazards that would preclude use of the site for the proposed development. The proposed structures should be designed to meet current *Uniform Building Code (UBC)/California Building Code (CBC)* requirements to limit potential damage from ground shaking.

4.2.1 Liquefaction

Liquefaction is a phenomenon in which granular material is transformed from a solid state to a liquefied state as a consequence of increased pore-water pressure and reduced effective stress. Increased pore-water pressure is induced by the tendency of granular materials to densify when subjected to cyclic shear stresses associated with earthquakes. This change of state occurs most readily in loose, saturated, cohesionless materials.

A review of liquefaction maps from the Department of Conservation, California Geologic Survey at www.conservation.ca.gov/cgs/shzp/Pages/Index.aspx did not reveal a map for the subject site.

It is our opinion, based on our review of the soil conditions encountered, the site soils encountered have a low potential of soil liquefaction.

4.2.2 Lateral Spreading

Lateral spreading/lurching is a situation in which soil mass deforms laterally toward a free face, such as a stream bank, during a seismic event. The failure occurs along a liquefiable/weak subsurface layer. Based on the soils encountered during our geotechnical investigation, it is our opinion that the site has a low potential for lateral spreading.

4.2.3 Flooding

The site does not appear to be located within the 100-year flood zone according to FEMA National Flood Insurance Rate Map (Map Number 06067C0328H). However, it is located in Zone X as indicating "Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood." The Project Civil Engineer should evaluate the site for flooding potential.

5.0 DISCUSSIONS

5.1 General

The recommendations contained in this report are based on the assumption that the soil conditions encountered during construction are similar to those disclosed by our exploration. If variations are noted during construction, Korbmacher Engineering, Inc. should be notified so that we can supplement our recommendations, as applicable.

Final grading plans were not available at the time of preparing this report. We recommend the final grading plans be reviewed by our office prior to starting the earthwork operations.

Provided the earthwork recommendations are followed, it is our opinion that the proposed retail building may be supported on a conventional foundation system established on compacted, engineered fill.

Proper drainage must be provided to prevent moisture from penetrating beneath foundations and concrete slabs-on-grade. If moisture penetrates the soils beneath these areas, there could be some movement and resulting cracking/distress. Recommendations to help reduce the movement of the foundations and concrete slab-on-grade floors/flatwork are discussed in later sections of this report.

6.0 RECOMMENDATIONS

6.1 Earthwork

6.1.1 General

As previously stated, final grading plans were not available during preparation of this report. We recommend that final grading plans be reviewed by our office prior to starting the grading operations.

6.1.2 Site Clearing

All grading must be observed by our representative. It is especially important that our representative be present during the demolition, stripping and scarification process to

observe whether undesirable materials are encountered. Loose, soft, uncontrolled fill, or disturbed native soils must be removed from all structural areas, beneath adjacent walks and slabs, beneath areas to receive fill, and beneath areas to be paved. Excavations must extend at least 2 feet beyond the structure and slab areas, if practicable. The term uncontrolled fill refers to any existing fill that was not properly inspected or tested by an engineering firm.

6.1.3 Excavations and Utility Trenches

As discussed earlier, the native soils consisted of stiff to hard silty clay, clayey silt and very dense silty gravel. Contractors, especially those digging utilities, should satisfy themselves as to the hardness of deposits and equipment required. If construction requires personnel to enter the excavation, the contractor must comply with the Occupational Health and Safety Administration regulations set forth in 29 CFR 1926.

Utility trenches that parallel the sides of the buildings should be placed so that they do not extend below a line sloped down and away at a slope of 2H:1V (horizontal to vertical) from the bottom outside edge of the perimeter foundations. All trenches should be backfilled with native materials compacted uniformly to the relative compaction specified in the following section. If local building codes require use of sand as the trench backfill, all utility trenches entering the building should be provided with an impervious seal of either cohesive soil or lean concrete where the trench passes under the building perimeter. The impervious plug should extend 4 feet into, and out of, the building perimeter. Jetting of trench backfill is not recommended as it may result in an unsatisfactory degree of compaction.

6.1.4 Fill Placement and Compaction

After performing the required excavations and/or prior to foundation excavations, the exposed subgrade soil should be carefully inspected to verify removal of all unsuitable deposits. The exposed subgrade soil should then be scarified to a depth of 12 inches, moisture-conditioned, and compacted to a minimum of 90 percent relative compaction at a minimum of 2 percent over optimum moisture content according to the latest ASTM test methods and procedures. After compacting the subgrade soil, all required fill should be placed in loose lifts a maximum of 8 inches in thickness.

On-site soil generated by site grading may be used as structural fill provided the soil is free of deleterious and organic materials and is approved for use as fill by our representative.

Pad/Structure Pad areas backfill should be compacted to a minimum of 90 percent relative compaction at a minimum of 2 percent over the optimum moisture content according to the latest ASTM test methods and procedures.

General fill and trench backfill should be compacted to a minimum of 90 percent relative compaction at a minimum of 2 percent over the optimum moisture content according to the latest ASTM test methods and procedures.

If pumping subgrade soils are encountered, we recommend over-excavating to firm, non-yielding soil and placing recompacted fill as recommended in Section 6.1.4. If non-yielding soil is not encountered within 2 feet below the proposed subgrade elevation, an acceptable option is to place a woven geotextile at the base of the excavation and backfill with a granular material. The geotextile should consist of Mirafi® HP370 or an approved equivalent. A test area should be prepared to evaluate the performance of the method. If a non-yielding pavement subgrade is not achieved, deeper excavation may be necessary.

Soils that are not pumping but are determined to be too wet to properly compact may be prepared by ripping the soil and allowing the soil to dry, excavating and replacing, or lime treating.

All import fill must be compacted to a minimum relative compaction of 90 percent of the maximum dry density and moisture-conditioned to a minimum of 2 percent over the optimum moisture content according to ASTM test methods and procedures. The import fill should be non-expansive, free of deleterious materials, and meet the requirements in Table 2.

Table 2	
IMPORTED MATERIAL REQUIREMENTS	
Sieve Size	Percent Passing
6 inches (155 mm)	100
4 inches (100 mm)	95 - 100
# 200	5 - 25
Plasticity (PI) = 12 or less	
Liquid Limit (LL) = 30 or less	

Samples of any proposed import fill planned for use on this project should be submitted to our representative for approval and appropriate testing no less than 4 working days before the expected delivery to the job site.

6.2 Foundations

6.2.1 Conventional Foundation System

If the earthwork recommendations included in this report are complied with, the proposed concession building may be supported by conventional foundations

established on compacted, engineered fill. Settlement of the proposed structures, supported as recommended, should be less than 1 inch. Recommendations for footing depths and foundation details are included in Table 3.

Table 3	
FOUNDATION DESIGN CRITERIA	
CONTINUOUS STRIP AND ISOLATED FOOTINGS	
Item	Criteria
Width:	
Wall Footings (Continuous)	Minimum 12 inches
Column Footings (Isolated)	Minimum 24 inches
Embedment Depth¹	
Native Soils	Minimum 18 inches
Allowable Bearing Capacity¹	
Compacted, Engineered Soil	2,000 psf
Coefficient of Sliding Friction	0.35

1. Footing embedment depth is measured from the lowest adjacent soil grade to the bottom of the footing.
2. The recommendations above are for a foundation designed for net dead plus live loads. These bearing pressures may be increased by one-third for wind or seismic loads.

The excavations for footings must be cleaned of all loose materials and debris, and moistened prior to placement of concrete. All footing excavations must be observed by our representative to verify the condition of the bearing material. If any localized areas of loose or soft undesirable subsoil are observed in footing excavations, the excavation for the footings must be over-excavated to firm soil and backfilled with compacted fill under the observations and testing of our representative.

All footings should be reinforced with top and bottom reinforcement to provide structural continuity and to permit spanning of local irregularities. The reinforcement of the footing should be designed by a structural engineer.

If a different type of foundation system is desired, this office should be called for supplemental recommendations. Such recommendations will be presented as an addendum to this report.

6.2.2 Seismic Design Site Coefficients

Based on the California Building Code (CBC 2013) and the USGS "Design Maps Summary Report," which are based on the ASCE7-10 Standard and IBC 2012, we present the following Table 4, 2013 CBC Earthquake Load Values.

Table 4	
2013 CBC EARTHQUAKE LOAD VALUES	
Classification/Parameters	Value
Latitude	38.449306
Longitude	-121.370546
Site Class Definition	D
Risk Category	I/II/III
Spectral Response Acceleration at 0.2-second, S_s	0.638
Spectral Response Acceleration at 1.0-second, S_1	0.282
Site Coefficient, F_A	1.29
Site Coefficient, F_V	1.833
Maximum Considered Earthquake Spectral Response Acceleration for short period, S_{MS}	0.823
Maximum Considered Earthquake Spectral Response Acceleration for 1-second period, S_{M1}	0.519
Spectral Response Acceleration at short periods, S_{DS}	0.549
Spectral Response Acceleration at 1-second period, S_{D1}	0.345

6.3 Lateral Load Design Criteria

Lateral loads may be resisted by soil friction and by the passive resistance of the soils. For engineered fill or native soil, we recommend the following lateral load design criteria:

- Coefficient of Friction. 0.35
- Passive Pressure. 350 psf/ft

The passive pressure and the frictional resistance of the soils may be combined without reduction in determining the total lateral resistance. These values are ultimate and an appropriate factor of safety should be applied by the structural engineer.

6.4 Concrete Slabs-on-Grade

If the earthwork recommendations are complied with, concrete slabs-on-grade may be protected from unwanted moisture vapor by an underlayment of a 4-inch thick capillary break of Class 2 drain rock, clean ½ by ¾-inch crushed drain rock, or pea gravel. Class 2 base rock may not be used as the capillary break. If the potential for a damp slab is

undesirable or if moisture sensitive floor coverings are used, we recommend that a vapor retarder membrane of 10-mil minimum thickness be placed on the drain rock and overlain by a minimum of 2 inches of clean sand to assist in the proper curing of the slab. The select material or sand should be moistened but not saturated prior to placement of concrete.

The American Concrete Institute (ACI) currently recommends placing the slab in direct contact with the membrane to eliminate the potential for water becoming trapped in the sand layer and transmitting through the slab. If the Project Engineer chooses to design the slab without the sand layer, the Engineer should be familiar with the ACI recommendations (ACI 302.1R-04) which include discussion of the potential problems associated with this design, such as an increased potential for slab curl.

It should be noted that the intention of the membrane is to limit moisture transmission through the slab, not to eliminate moisture transmission through the slab. A membrane will not eliminate moisture transmission which can cause mold growth. The membrane must be constructed properly to effectively limit moisture transmission. Proper construction includes sealing the perimeter of the membrane as well as all seams and penetrations. For best results, the membrane should meet the requirements of ASTM E-1745.

If greater resistance to moisture transmission is desired, we recommend sealing the slab with an approved concrete sealant. We also recommend reducing the water-cement ratio of the concrete mix design for slabs as low as possible to help further reduce the potential for moisture passing through the slab. The structural engineer should determine the final requirements of the concrete mix design.

We recommend concrete slab-on-grade floors and exterior flatwork be a minimum thickness of 4 inches and the trash enclosure area slab and pavement area be a minimum thickness of 5½ inches at a concrete compressive strength of a minimum of 3,500 pounds per square inch (psi). The trash enclosure area and pavement section should be designed and prepared according to the recommendations presented in Section 6.6 Pavements.

We recommend reinforcing the concrete slab-on-grade floors with a minimum of either, (1) No. 3 reinforcing bars spaced at 24 inches on center, or (2) with an alternate steel reinforcement as required by the project structural engineer. In general, the steel reinforcement should be supported by concrete dobies to maintain the minimum requirement for clearance according to the latest UBC standard. The project structural engineer should determine the acceptable concrete cover. Crack control joints should be located as recommended by the project Structural Engineer.

Recommendations presented in the American Concrete Institute manual should be complied with for all concrete placement and curing operations. Improper curing techniques and/or excessive slump (water-cement ratio) could cause excessive shrinkage, cracking or curling. Concrete slabs should be allowed to cure adequately before placing vinyl or other moisture sensitive floor coverings.

6.5 Drainage

Grades should be such that drainage is away from the structures. Water and sewer utility lines should be properly installed to avoid becoming possible sources for subsurface saturation. It is important that all utility trenches be properly backfilled. If practicable, planters and/or landscaping should not be adjacent to or near the structures. If vegetation must be planted adjacent to or near structures, plants that require very little moisture with drip irrigation systems should be used. Sprinkler heads should not be placed where they could saturate foundation soil.

6.6 Pavements

Based on the laboratory R-value test result of 56, we recommend the pavement sections listed in Table 6.

TABLE 6				
PAVEMENT DESIGN CRITERIA				
TRAFFIC INDEX	ASPHALT		AGGREGATE BASE	
	(inches)	(mm)	(inches)	(mm)
Flexible Pavement				
4.5 (Parking Stalls)	2½	64	6	153
5.0	3	80	6	153
6.0	3½	90	6	280
Rigid Pavement	CONCRETE		AGGREGATE BASE	
	(inches)	(mm)	(inches)	(mm)
Concrete Pavement (3,500 psi min.)	5½	153	--	--

The recommended sections are based on the assumed Traffic Indices (TI) and or an average daily truck traffic of 25 for rigid pavements. The recommended pavement section should be revised if site grading changes the characteristic of the near surface soil condition or a different TI is desired.

Subgrade for the on-site paved areas should be properly prepared as discussed in the Earthwork section of this report and as recommended below prior to placing asphalt or aggregate base materials. Proper drainage of paved areas should be provided to

prevent water from entering beneath the pavement to help increase the life of the pavement and help avoid possible premature failure.

To perform to its greatest efficiency, the pavement section requires the following construction criteria:

- a. Remove organic and deleterious materials from all pavement subgrade.
- b. Moisture-condition and compact the upper 12 inches of subgrade soil to a minimum relative compaction of 95 percent at a minimum moisture content of 2 percent above the optimum moisture content. All pavement subgrade should be stable with no "pumping" at the time the base rock is placed. Refer to Section 6.1.4, Fill Placement and Compaction, for additional recommendations.
- c. Use only good quality materials of the type and minimum thickness specified. All base rock should meet the *Standard Specifications* of the State of California for Class 2 baserock and should be angular in shape.
- d. Compact the baserock uniformly to a minimum relative compaction of 95 percent.
- e. Place the asphalt concrete only during periods of fair weather when the free air temperature is within the prescribed limits as set forth by the Asphalt Concrete Institute.
- f. Compact all trench backfill under the pavement to minimize pavement damage resulting from settlement. Mechanical compaction is recommended because material placed by jetting or ponding will probably not attain satisfactory densities.
- g. Provide adequate drainage or V-ditch systems to prevent surface water from migrating into the subgrade pavement soil from behind curb-and-gutter sections. For areas where pavement abuts landscaping, we recommend extending the concrete curb a minimum of 3 inches below the bottom of the base rock layer to form a cut-off wall to prevent water from migrating into the base rock. If vegetation will be planted adjacent to the pavement, plants that require very little moisture with drip irrigation systems should be used.
- h. Butt-type joints, relying on aggregate interlock for load transfer, are acceptable for parking lots serving light vehicles. For heavy truck traffic, dowels should be considered. Dowels should consist of plain (smooth) dowels and should be aligned and lubricated properly for proper joint function (ref. ACI 330R-01).
- i. We recommend reinforcing concrete pavement that will receive significant truck traffic. Reinforcement should also be considered for odd-shaped slabs, such as a slabs that taper to a sharp angle, slabs with a length to width ratio greater than 1.5, or slabs that are neither square or rectangular. The function of the reinforcement is to hold together the fracture faces when cracks form. Reinforcement should be discontinued at contraction/construction joints (ref. ACI 330R-01).

- j. Joint spacing for unreinforced concrete pavement should be at a maximum of 15 feet. Joint spacing for reinforced concrete pavement may be designed in accordance with ACI recommendations (ref. ACI 330R-01).
- k. Automobile traffic should not be allowed on pavement until the concrete has attained a strength of 3,500 psi. Alternatively, automobile traffic should not be allowed on pavement slabs for 3 days, and all other traffic should be kept off pavement slab for at least 7 days (ref. ACI 330R-01). In addition, traffic should avoid unsupported slab edges.
- l. The design and construction of concrete pavement section should be according to the latest Portland Cement Association (ref. PCA publication "Design and Control of Concrete Mixtures") and ACI recommendations.

6.7 Miscellaneous

Our exploration did not reveal the presence of buried items such as leaching fields, wells, storage tanks, etc other than previously discussed. It is possible, however, that such items may be present. If such items are encountered during grading or during excavations of foundations, our firm should be notified immediately to provide recommendations for proper procedures. Also, this study did not include investigations for toxic substances or groundwater contamination of any type. If such conditions are encountered during site development, additional studies will be required.

6.8 Plan Review

Before submitting design drawings and construction documents to the appropriate local agency for approval, copies of the documents should be reviewed by our firm to ensure that the recommendations in this report have been effectively incorporated.

6.9 Construction Observations

We recommend that our representative be present during grading and foundation excavation to observe that the work performed is in conformance with specifications and recommendations provided here. We will also perform testing as necessary to evaluate the quality of the materials and their relative compaction. Records will be maintained of our site visits and test results.

At the completion of site grading and foundation excavation, we will submit a summary of our observation and test results along with any necessary supplemental recommendations. To assure that our personnel are at the site when needed, we require that you notify us at least 2 working days before the task begins.

7.0 LIMITATIONS

This report has been prepared for the exclusive use of the Client and the Client's consultants for specific application to the proposed development. If changes occur in the nature, design location, or configuration of the proposed development, the conclusions and recommendations contained here shall not be considered valid. Changes must be reviewed by our firm.

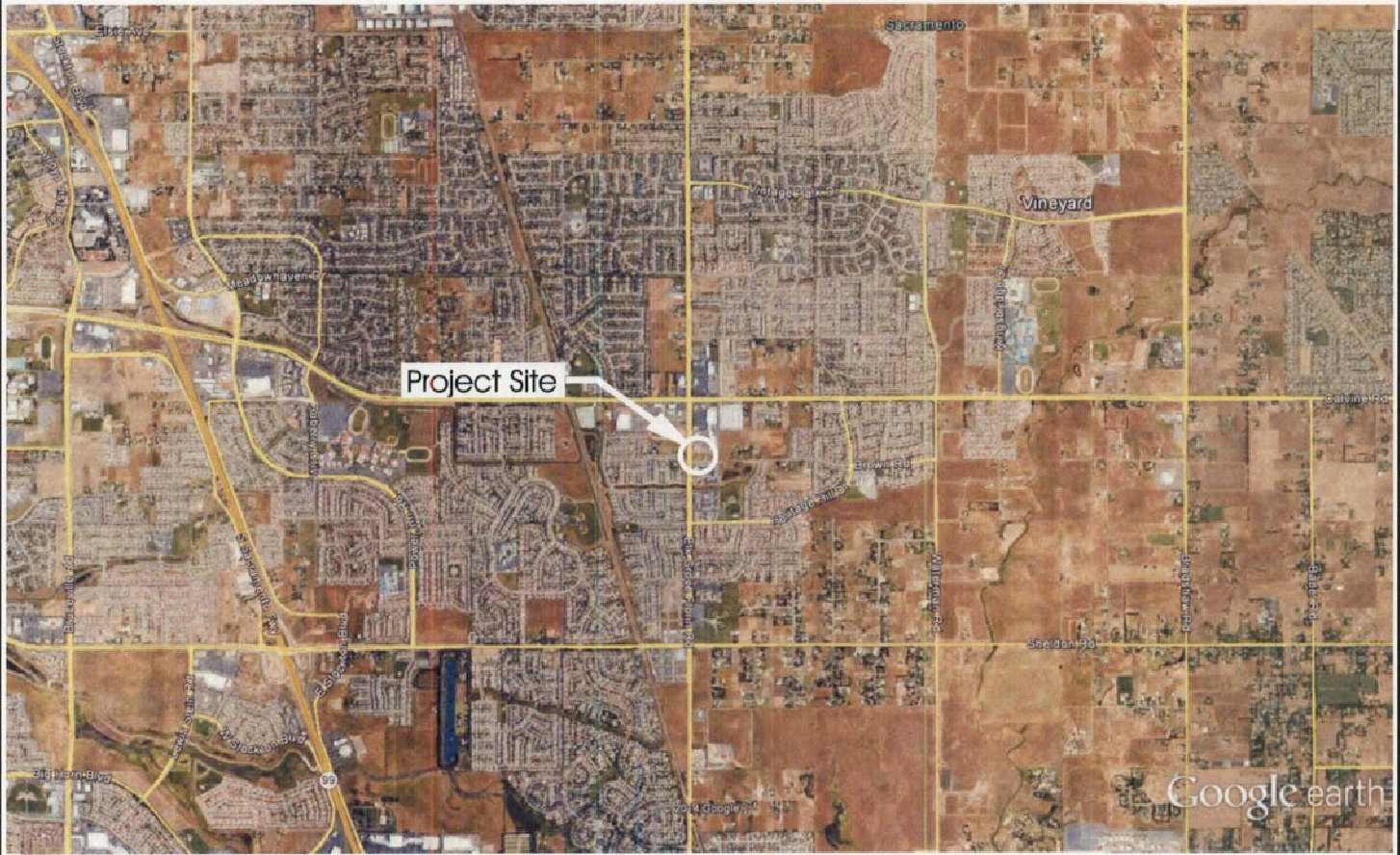
The analysis, opinions, conclusions and recommendations submitted in this report are based in part on the referenced materials, site visit and evaluation, and subsurface exploration. The nature and extent of variation among exploratory borings may not become evident until construction. If variations appear, it will be necessary to re-evaluate or revise recommendations made in this report.

The recommendations in this report are contingent on conducting an adequate testing and observation program during construction of the proposed development. Unless the construction observation and testing program is provided by or coordinated with our firm, Korbmacher Engineering, Inc. will not be held responsible for compliance with design recommendations presented in this report and other supplemental reports submitted as part of this report.

Our services have been provided in accordance with generally accepted geotechnical engineering practices. No warranties are made, express or implied, as to the professional opinions or advice provided. Recommendations contained in this report are valid for a period of 1 year; after 1 year they must be reviewed by this firm to determine whether or not they still apply.

8.0 REFERENCES

- American Concrete Institute, ACI 330R-08, Guide for the Design and Construction of Concrete Parking Lots, Reported by ACI Committee 330. June 2008.
- California Department of Transportation, Highway Design Manual, <http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm#hdm>, updated 24 July 2009.
- California Building Code, 2013 California Building Code, Title 24, Part 2 Volume 2 of 2, based on the 2012 International Building Code, effective date 1 January 2014.
- California Department Of Conservation, Division Of Mines And Geology (CDMG), Seismic Hazards Zonation Program, State of California, Seismic Hazard Zones, Updated 5 December 2007.
- Federal Emergency Management Agency (FEMA), National Flood Insurance Map, <https://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1&userType=G>
- Federal Emergency Management Agency (FEMA), National Flood Insurance Map, Sacramento County, California and Incorporated areas, Community Panel Number 06067C0328H, Effective date 16 August 2012.
- International Conference Of Building Officials, "Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions Of Nevada, to be used in 1997 Uniform Building Code, Published February 1998.
- USGS, US Seismic Design Maps,
<http://earthquake.usgs.gov/designmaps/us/application.php>
And <http://earthquake.usgs.gov/hazards/designmaps/usdesignndoc.php>



Not to scale

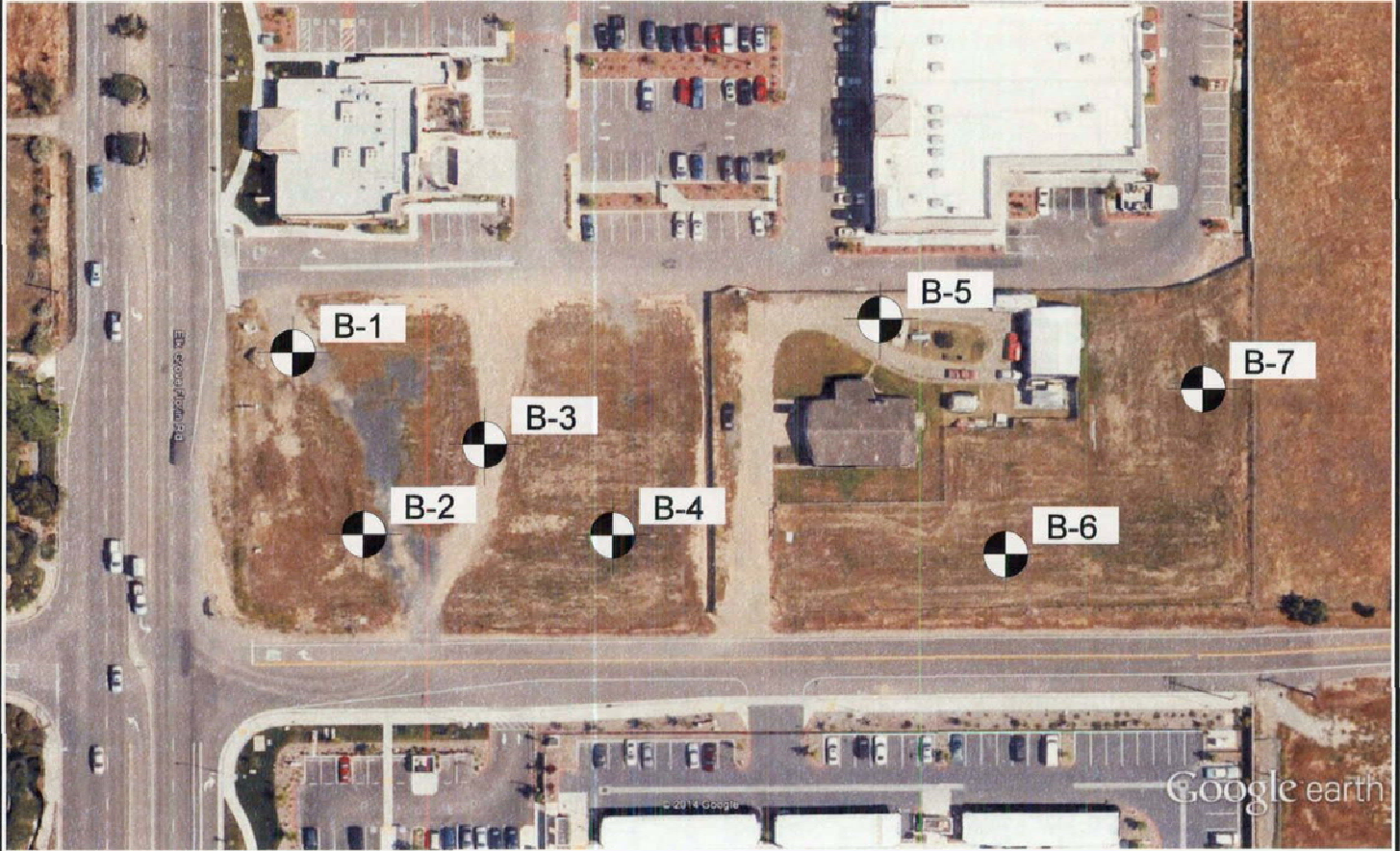


VICINITY MAP

99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

1



Source: PM Design Group

Not to scale



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PROJECT NO. 1428

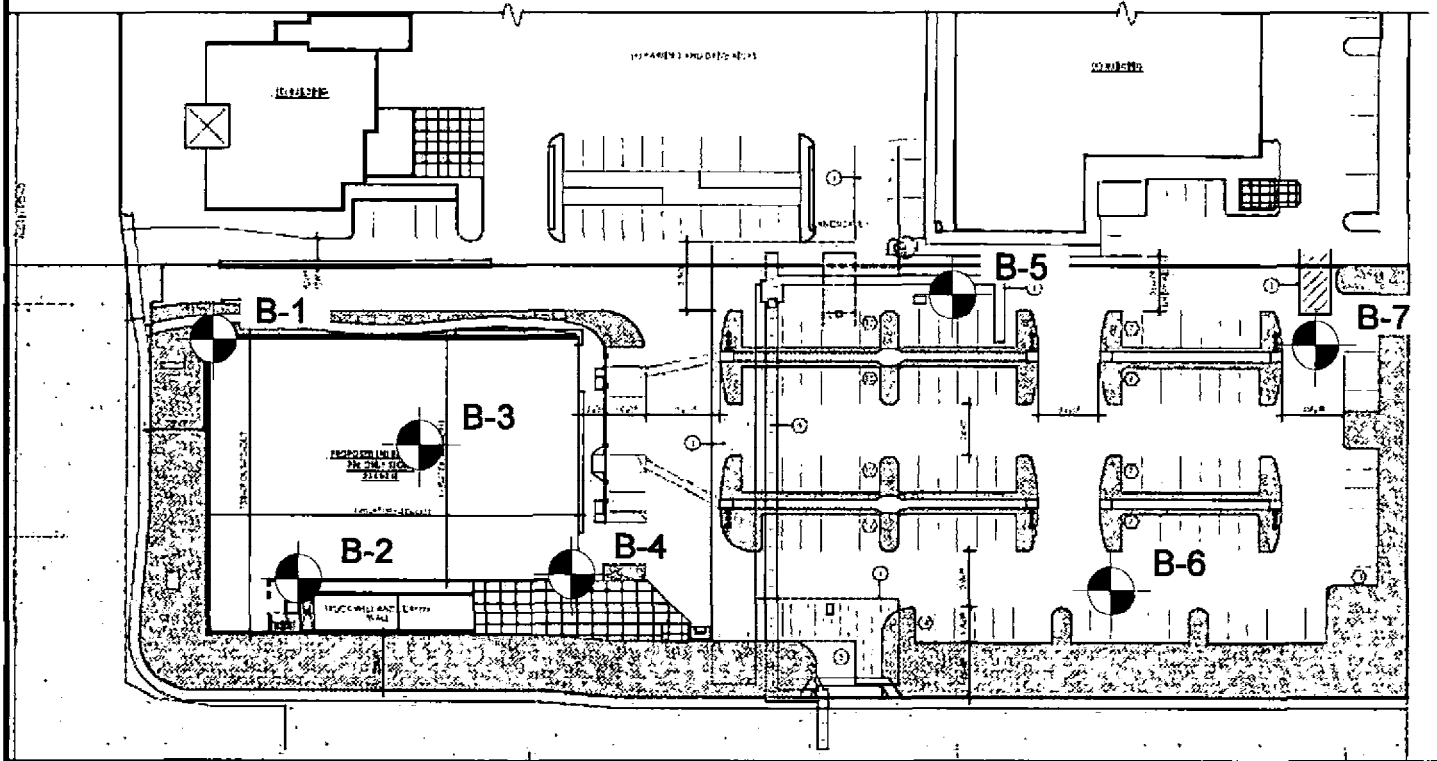
DATE 05/14

BORING LOCATION MAP

99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

2



Not to scale



Korbmacher
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BORING LOCATION MAP

99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

3

PROJECT NO. 1428

DATE 05/14

UNIFIED SOIL CLASSIFICATION SYSTEM







MAJOR DIVISIONS	LTR	DESCRIPTION	
COARSE-GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW	WELL-GRADED GRAVELS OR GRAVEL SAND MIXTURES. LITTLE OR NO FINES
		GP	POORLY-GRADED GRAVELS OR GRAVEL SAND MIXTURE, LITTLE OR NO FINES
		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
		GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SAND AND SANDY SOILS	SW	WELL-GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES
		SP	POORLY-GRADED SANDS, OR GRAVELLY SANDS, LITTLE OR NO FINES
		SM	SILTY SANDS, SAND-SILT MIXTURES
		SC	CLAYEY SANDS, SAND-CLAY MIXTURES

MAJOR DIVISIONS	LTR	DESCRIPTION	
FINE-GRAINED SOILS	SILTS AND CLAYS LL < 50	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
		OL	ORGANIC SILTS AND ORGANIC SILT-CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LL > 50	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE, SANDY OR SILTY SOILS, ELASTIC SILTS
		CH	INORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, FAT CLAYS
		OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS	Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS	

NOTES

THE LINES SEPARATING STRATA ON THE LOGS REPRESENT APPROXIMATE BOUNDARIES ONLY. THE ACTUAL TRANSITION MAY BE GRADUAL. NO WARRANTY IS PROVIDED AS TO THE CONTINUITY OF SOIL STRATA BETWEEN BORINGS. LOGS REPRESENT THE SOIL SECTION OBSERVED AT THE BORING LOCATION ON THE DATE OF DRILLING ONLY.

KEY TO SYMBOLS

-  MODIFIED CALIFORNIA SAMPLER, 2.0-ID
-  MODIFIED CALIFORNIA SAMPLER, 2.5-ID
-  SHELBY TUBE SAMPLE
-  STANDARD PENETRATION SPLIT-SPOON SAMPLE
-  WATER LEVEL OBSERVED IN BORING
-  NO RECOVERY
- NFWE NO FREE WATER ENCOUNTERED



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PROJECT NO. 1428

DATE 05/14

BORING LOG LEGEND

99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

4

Depth, ft	Soil Description	Consistency	USCS Symbol	FIELD LABORATORY						Unc. Compression Laboratory/Pocket Penetrometer	% Fines/Clay (#200 Sieve/ <0.005 mm)
				Sample	Blows per ft.	Moisture Content %	Dry Density, pcf	Plasticity Index %			
								LL	PI		
	Clayey SILT, brown, damp	Stiff to Very Stiff	ML								
	Gravelly SILT/Silty GRAVEL, reddish brown, angular fine gravel, 1/4 inch diameter, damp	Very Stiff to Very Dense	ML/GM		34	11	109	19	4		
5	Clayey SILT, reddish brown, slightly cemented, damp	Hard	ML		50/6"	10	96	23	8		
10	Clayey SILT, grey brown, damp	Hard	ML								
					50/11"	29	94				
15											
					92	30	93				
20	Bottom of boring at 16 1/2 feet. NFWF Boring backfilled with soil cuttings.										
25											
30											

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LOG OF BORING NO. B-1

99 Cent Store
 NEC Brown Rd and Florin Rd
 Elk Grove, California

FIGURE NO.

5

PROJECT NO. 1428

DATE 05/14

Logged By: S. Bittman
 Drill Rig: CME 45
 Type of Hammer: Automatic
 Date Drilled: 13 May 2014

Boring Elev: Existing Grade
 Boring Diam: 4 in.
 Wt. of Hammer/Drop: 140 lbs/30 in.

Depth, ft	Soil Description	Consistency	USCS Symbol	FIELD		LABORATORY					
				Sample	Blows per ft.	Moisture Content %	Dry Density, pcf	Plasticity Index %		Unc. Compression Laboratory/Pocket Penetrometer	% Fines/Clay (#200 Sieve/ <0.005 mm)
								LL	PI		
	Clayey SILT, brown, damp	Stiff	ML								
	Clayey SILT/Gravelly SILT, reddish brown, angular fine gravel, 1/4 inch diameter, damp	Very Stiff to Very Dense	ML/GM		41	6	122				
5	Clayey SILT, reddish brown, slightly cemented, damp	Hard	ML		95/9"	10	100				
10	Clayey SILT, grey brown, damp	Hard	ML		50/4"						
15					50/4"						
	Bottom of boring at 16 feet. NFWF Boring backfilled with soil cuttings.										
20											
25											
30											

Files\Reports 2014\1428\Figure6



Korbmacher
Engineering Inc.

PROJECT NO. 1428

DATE 05/14

LOG OF BORING NO. B-2

99 Cent Store
 NEC Brown Rd and Florin Rd
 Elk Grove, California

FIGURE NO.

6

Logged By: S Bittman
 Drill Rig: CME 45
 Type of Hammer: Automatic
 Date Drilled: 13 May 2014

Boring Elev: Existing Grade
 Boring Diam: 4 in.
 Wt. of Hammer/Drop: 140 lbs/30 in.

Depth, ft	Soil Description	Consistency	USCS Symbol	FIELD		LABORATORY					
				Sample	Blows per ft.	Moisture Content %	Dry Density, pcf	Plasticity Index %		Unc. Compression Laboratory/Pocket Penetrometer	% Fines/Clay (#200 Sieve/ <0.005 mm)
								LL	PI		
0-5	Clayey SILT, light brown, damp - color change to orange brown with gravels	Stiff	ML		38	8	107				
5-10	Clayey SILT/Gravelly SILT, reddish brown, angular fine gravel, 1/4 inch diameter, damp - decreasing gravels, becomes grey brown	Very Stiff to Very Dense	ML/GM		52/6"	12	122				
10-15	Clayey SILT, grey brown, damp	Hard	ML		50/2"						
15-20	Silty SAND, grey brown, very fine grained, damp	Very Dense	ML		50	29	90				
20-25	- increase grain size,				79	12	107				
25-30	Silty CLAY/Clayey SILT, brown, damp	Very Stiff	CL/ML		50/4"						

Files/Reports 2014/1428/Figure 7



LOG OF BORING NO. B-3
 99 Cent Store
 NEC Brown Rd and Florin Rd
 Elk Grove, California

FIGURE NO.
7

Logged By: S. Bittman

Boring Elev: Existing Grade

Drill Rig: CME 45

Boring Diam: 4 in.

Type of Hammer: Automatic

Date Drilled: 13 May 2014

Wt. of Hammer/Drop: 140 lbs/30 in.

Depth, ft	Soil Description	Consistency	USCS Symbol	FIELD LABORATORY							
				Sample	Blows per ft.	Moisture Content %	Dry Density, pcf	Plasticity Index %		Unc. Compression Laboratory/Pocket Penetrometer	% Fines/Clay (#200 Sieve/ <0.005 mm)
								LL	PI		
25	Silty SAND, grey brown, very fine grained to coarse grain, damp	Very Dense	SM		50/4"						
	Silty CLAY/Clayey SILT, brown, damp	Very Stiff	CL/ML								
30					50/4"	18	108				
	Bottom of boring at about 30½ feet. NFWF Boring backfilled with soil cuttings.										
35											
40											
45											
50											
55											

Files\Reports 2014\1428\Figure8



Korbmacher
Engineering Inc.

PROJECT NO. 1428

DATE 05/14

LOG OF BORING NO. B-3 Continued

99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

8

Depth, ft	Soil Description	Consistency	USCS Symbol	FIELD		LABORATORY					
				Sample	Blows per ft.	Moisture Content %	Dry Density, pcf	Plasticity Index %		Unc. Compression Laboratory/Pocket Penetrometer	% Fines/Clay (#200 Sieve) <0.005 mm
								L	Pi		
	Clayey SILT, light brown, damp	Stiff	ML		17						
5	Clayey SILT/Gravelly SILT, reddish brown, angular fine gravel, 1/4 inch diameter, damp - decreasing gravels, becomes grey brown	Very Stiff to Very Dense	ML/GM		50/4"						
10	Clayey SILT, yellow brown, damp - color change to grey brown	Hard	ML		50/5"						
15					50/3"						
20	Bottom of boring at 15 1/2 feet. NFWF Boring backfilled with soil cuttings.										
25											
30											

Files/Reports 2014/1428/Figure 9



LOG OF BORING NO. B-4

99 Cent Store
 NEC Brown Rd and Florin Rd
 Elk Grove, California

FIGURE NO.

9

PROJECT NO. 1428

DATE 05/14

Logged By: S. Bittman

Boring Elev: Existing Grade

Drill Rig: CME 45

Boring Diam: 4 in.

Type of Hammer: Automatic

Date Drilled: 13 May 2014

Wt. of Hammer/Drop: 140 lbs/30 in.

Depth, ft	Soil Description	Consistency	USCS Symbol	FIELD LABORATORY							
				Sample	Blows per ft.	Moisture Content %	Dry Density, pcf	Plasticity Index %		Unc. Compression Laboratory/Pocket Penetrometer	% Fines/Clay (#200 Sieve) <0.005 mm
								F	PI		
	Clayey SILT, light brown, damp	Stiff	ML		13						
5	Clayey SILT/Gravelly SILT, reddish brown, angular fine gravel, 1/4 inch diameter, damp	Very Stiff to Very Dense	ML/GM		55/6"						
10	Bottom of boring at 6 feet. NFWF Boring backfilled with soil cuttings.										
15											
20											
25											
30											



Korbmacher
Engineering Inc.

LOG OF BORING NO. B-5

99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

10

PROJECT NO. 1428

DATE 05/14

Logged By: S. Bittman

Boring Elev: Existing Grade

Drill Rig: CME 45

Boring Diam: 4 in.

Type of Hammer: Automatic

Date Drilled: 13 May 2014

Wt. of Hammer/Drop: 140 lbs/30 in.

Depth, ft	Soil Description	Consistency	USCS Symbol	FIELD		LABORATORY					
				Sample	Blows per ft.	Moisture Content %	Dry Density, pcf	Plasticity Index %		Unc. Compression Laboratory/Pocket Penetrometer	% Fines/Clay (#200 Sieve) <0.005 mm
								FL	PI		
	Clayey SILT, light brown, damp	Very Stiff to Hard	ML		40						
5	Clayey SILT/Gravelly SILT, reddish brown, angular fine gravel, 1/4 inch diameter, damp	Very Stiff to Very Dense	ML/GM		50/6"						
	Bottom of boring at 5 1/2 feet. NFWE Boring backfilled with soil cuttings.										
10											
15											
20											
25											
30											

Files/Reports 2014/1428/Figure 11



Korbmacher
Engineering Inc.

LOG OF BORING NO. B-6

99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

11

PROJECT NO. 1428

DATE 05/14

Logged By: S Bittman

Boring Elev: Existing Grade

Drill Rig: CME 45

Boring Diam: 4 in.

Type of Hammer: Automatic

Date Drilled: 13 May 2014

Wt. of Hammer/Drop: 140 lbs/30 in.

Depth, ft	Soil Description	Consistency	USCS Symbol	FIELD		LABORATORY					
				Sample	Blows per ft.	Moisture Content %	Dry Density, pcf	Plasticity Index %		Unc. Compression Laboratory/Pocket Penetrometer	% Fines/Clay (#200 Sieve/ <0.005 mm)
								LL	PI		
	Clayey SILT, brown, damp	Stiff	ML								
5	Clayey SILT/Gravelly SILT, grey to yellow brown, angular fine to coarse gravel, damp	Very Stiff to Very Dense	ML/GM		69						
					50/4"						
10	Clayey SILT, grey brown, damp	Hard	ML								
					50/6"						
15	Bottom of boring at 16 feet. NFWE Boring backfilled with soil cuttings.										
20											
25											
30											

Files\Reports 2014\1428\Figure 7



Korbmacher
Engineering Inc.

LOG OF BORING NO. B-7

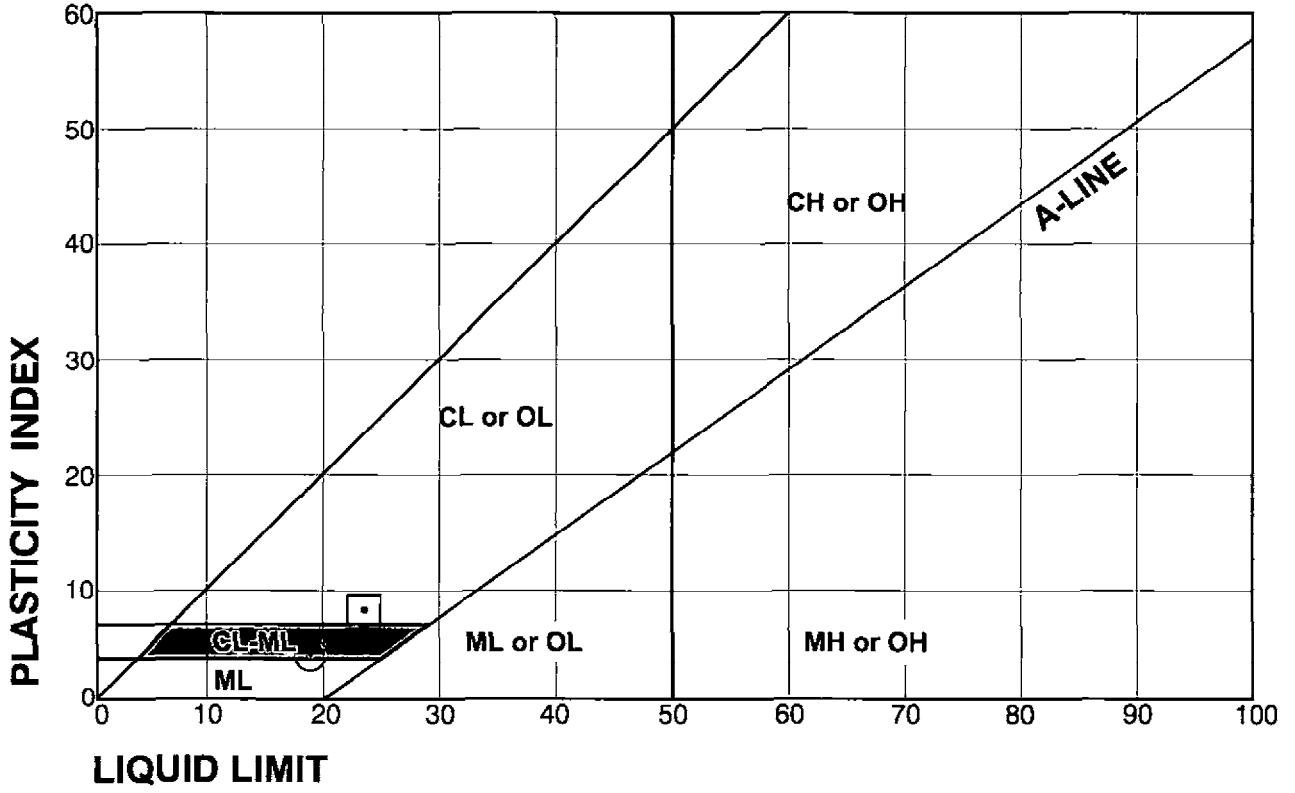
99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

12

PROJECT NO. 1428

DATE 05/14



TEST SYMBOL	BORING NO.	SAMPLE NO.	LIQUID LIMIT	PLASTICITY INDEX	CLASSIFICATION
⊙	B-1	1	18.9	4.4	CL/ML - Silty CLAY/Clayey SILT, Brown
□	B-1	1	22.8	8.4	CL - Silty CLAY, Medium Brown

Files/Reports 2014/1428/Figure 13



PROJECT NO. 1428

DATE 05/14

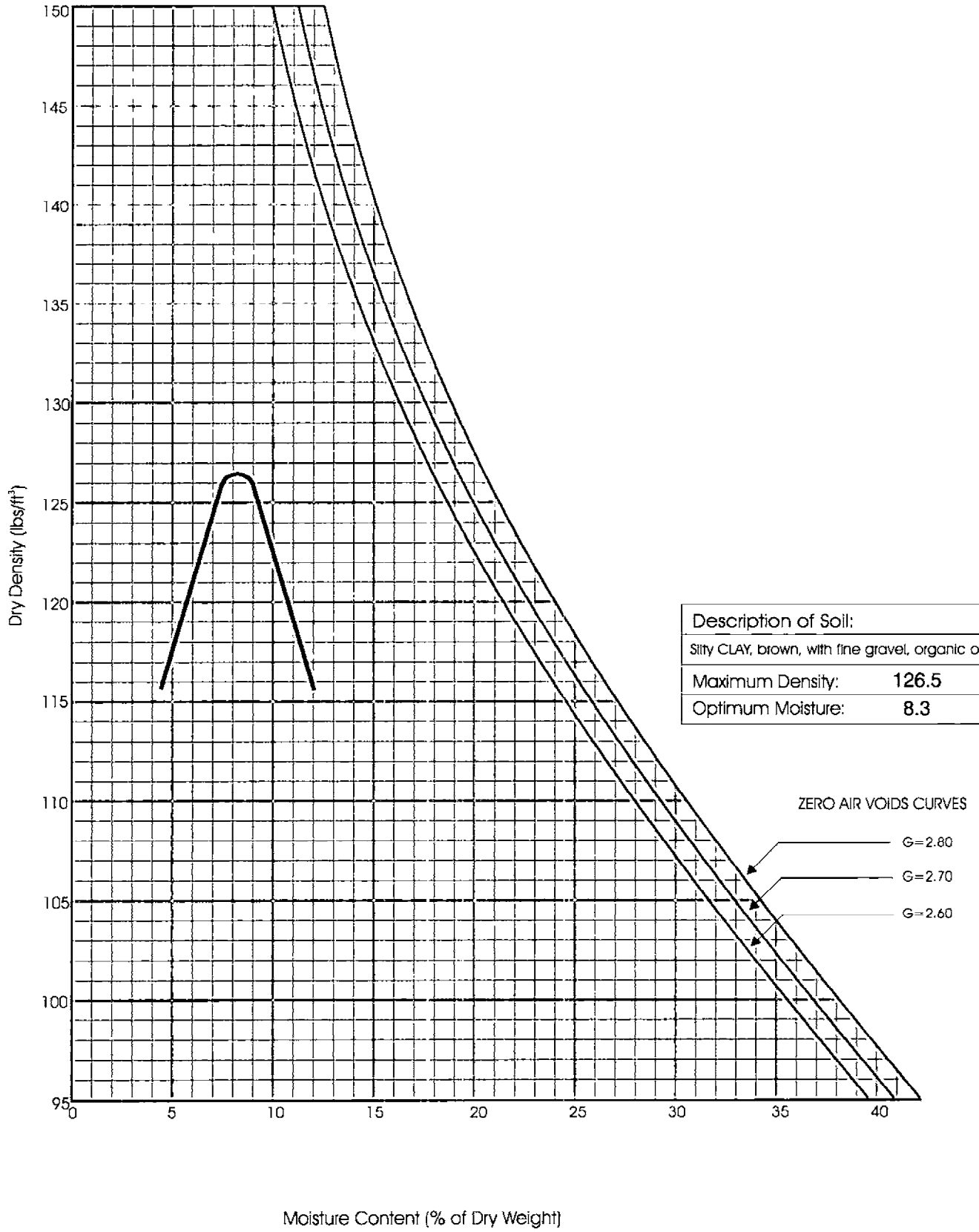
PLASTICITY CHART

99 Cent Store
 NEC Brown Rd and Florin Rd
 Elk Grove, California

FIGURE NO.

13

ASTM Test Method D 1557



Files\Reports 2014\1428\Figure 14



Korbmacher
Engineering Inc.

PROJECT NO. 1428

DATE 05/14

MOISTURE/DENSITY RELATIONSHIP

99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

14

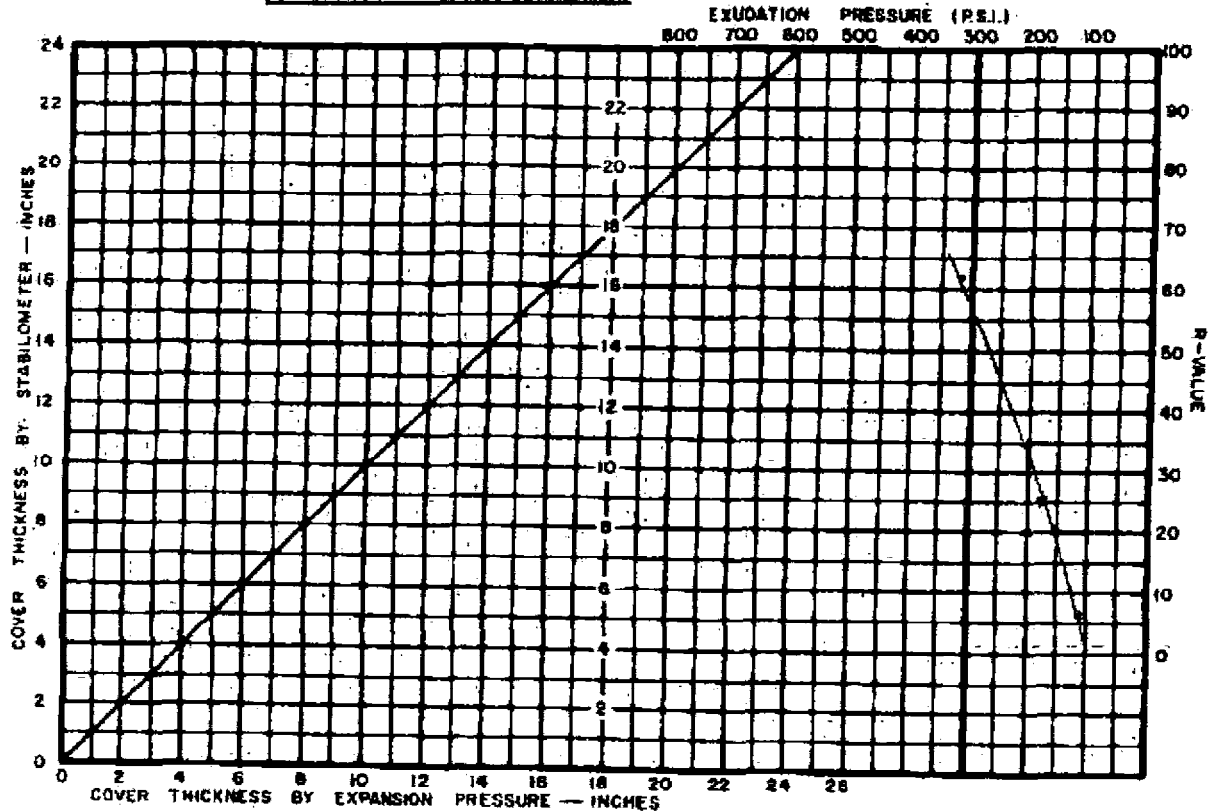


CONSTRUCTION MATERIALS TESTING INC

Job Name: 99 cent store
 Sample Description: dark yellow brown silty sand
 Source: on-site
 Client Name: Korbmacher Engineering Inc. #1428

Job No: 99787
 Sample No: 1
 Date: 6-10-14
 Sampled: client Tested: ipm

R-VALUE CAL - TEST 301



Exudation psi	Compaction psi	Expansion (0.0001")	Expansion psi	Moisture %	Dry Density	Resistance Value
317	350	0.0003	13	11.2	122.6	61
180	325	0.0000	0	12.2	120.9	25
106	275	0.0000	0	13.5	118.5	6

Remarks: _____

Resistance Value
 56

Files/Reports 2014/1428/Figure35



Korbmacher
Engineering Inc.

PROJECT NO. 1428

DATE 05/14

RESISTANCE VALUE (R-VALUE)

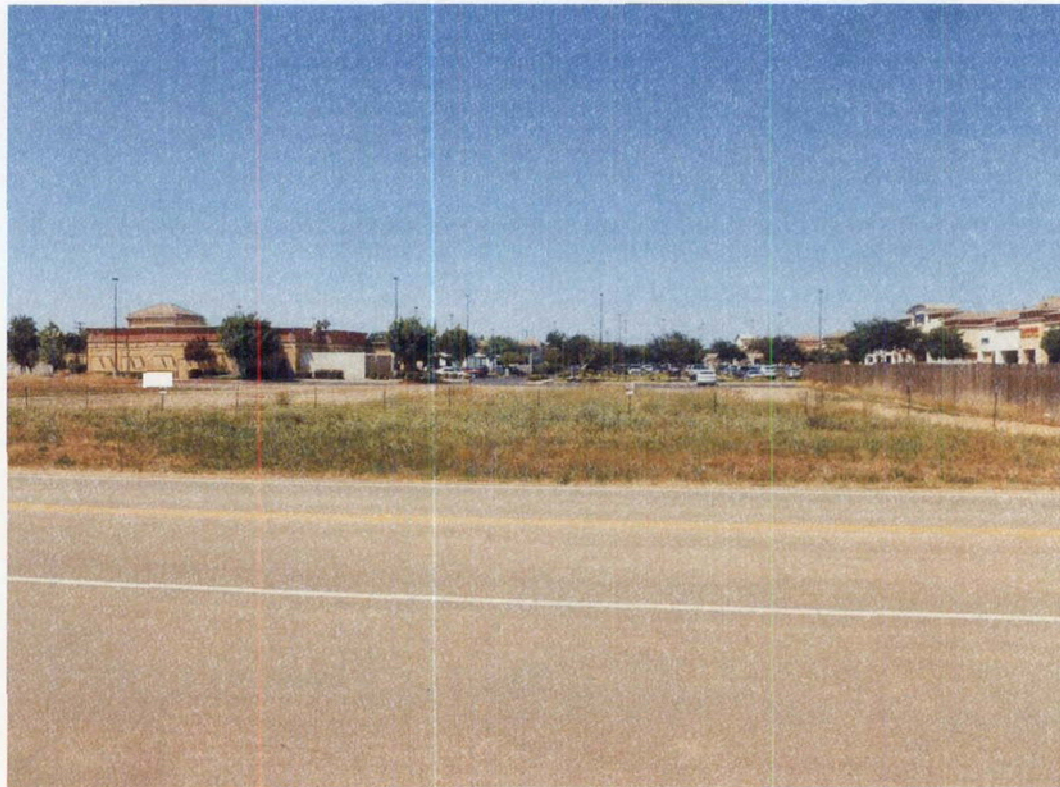
99 Cent Store
 NEC Brown Rd and Florin Rd
 Elk Grove, California

FIGURE NO.

15



Project Site, Looking Westerly



Project Site, Middle Portion Looking Northward

Not to Scale

Files\Reports 2014\1428\Figure 16



Korbmacher
Engineering Inc.

PROJECT NO. 1428

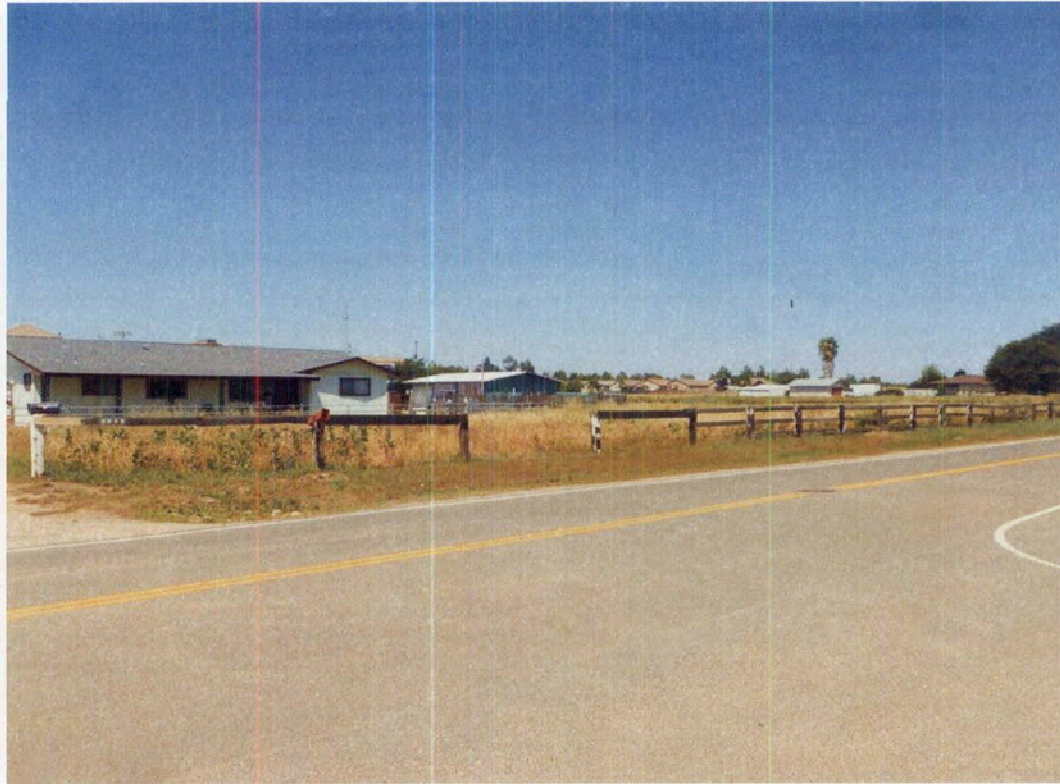
DATE 05/14

PHOTOGRAPHS OF PROJECT SITE

99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

16



Project Site, Eastern Portion, Looking Northeasterly



Project Site, Eastern Portion Looking Northwesterly

Not to Scale

Files\Reports\2014\1428\Figure 17



Korbmacher
Engineering Inc.

PROJECT NO. 1428

DATE 05/14

PHOTOGRAPHS OF PROJECT SITE

99 Cent Store
NEC Brown Rd and Florin Rd
Elk Grove, California

FIGURE NO.

17

APPENDIX A
CORROSIVITY ANALYSIS

9 June, 2014

Job No.1406008
Cust. No.10990

Mr. Bruno Korbmacher
Korbmacher Engineering, Inc.
P.O. Box 405
Livermore, CA 94551

Subject: Project No.: 1428
Project Name: 99 Cent Store, Florin Rd & Brown Rd, Elk Grove
Corrosivity Analysis – ASTM Test Methods

Dear Mr. Korbmacher:

Pursuant to your request, CERCO Analytical has analyzed the soil sample submitted on June 2, 2014. Based on the analytical results, a brief corrosivity evaluation is enclosed for your consideration.

Based upon the resistivity measurement, the sample is classified as “moderately corrosive”. All buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron should be properly protected against corrosion depending upon the critical nature of the structure. All buried metallic pressure piping such as ductile iron firewater pipelines should be protected against corrosion.

The chloride ion concentration is none detected to 15 mg/kg.

The sulfate ion concentration is 27 mg/kg and is determined to be insufficient to damage reinforced concrete structures and cement mortar-coated steel at these locations.


The pH of the soil is 7.99 which does not present corrosion problems for buried iron, steel, mortar-coated steel and reinforced concrete structures.

The redox potential is 420-mV which is indicative of aerobic soil conditions.

This corrosivity evaluation is based on general corrosion engineering standards and is non-specific in nature. For specific long-term corrosion control design recommendations or consultation, please call *JDH Corrosion Consultants, Inc.* at (925) 927-6630.

We appreciate the opportunity of working with you on this project. If you have any questions, or if you require further information, please do not hesitate to contact us.

Very truly yours,
CERCO ANALYTICAL, INC.


J. Darby Howard, Jr., P.E.
President

JDH/jdl
Enclosure

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

The California Environmental Quality Act (CEQA) Guidelines, Section 15091(d), requires public agencies, as part of the certification of an environmental impact report, to adopt a reporting and monitoring program to ensure that changes made to the project as conditions of project approval to mitigate or avoid significant environmental effects are implemented. The Mitigation Monitoring and Reporting Program (MMRP) contained herein is intended to satisfy the requirements of CEQA as they relate to the 99 Cents Only Store Project (Project) in the City of Elk Grove (City). The MMRP is intended to be used by City staff and mitigation monitoring personnel during implementation of the Project.

The MMRP will provide for monitoring of construction activities as necessary, in-the-field identification and resolution of environmental concerns, and reporting to City staff. The MMRP will consist of the components described below.

COMPLIANCE CHECKLIST

Table 1 contains a compliance-monitoring checklist that identifies all newly adopted mitigation measures, identification of agencies responsible for enforcement and monitoring, and timing of implementation.

FIELD MONITORING OF MITIGATION MEASURE IMPLEMENTATION

During construction of the Project, the City of Elk Grove's designated construction inspector will be responsible for monitoring the implementation of mitigation measures. The inspector will report to the City of Elk Grove Department of Public Works, and will be thoroughly familiar with all plans and requirements of the project. In addition, the inspector will be familiar with construction contract requirements, construction schedules, standard construction practices, and mitigation techniques. Aided by Table 1, the inspector will typically be responsible for the following activities:

1. On-site, day to day monitoring of construction activities;
2. Reviewing construction plans to ensure conformance with adopted mitigation measures;
3. Ensuring contractor knowledge of and compliance with all appropriate conditions of project approval;
4. Evaluating the adequacy of construction impact mitigation measures, and proposing improvements to the contractors and City staff;
5. Requiring correction of activities that violate project mitigation measures, or that represent unsafe or dangerous conditions. The inspector shall have the ability and authority to secure compliance with the conditions or standards through the City of Elk Grove Public Works Department, if necessary;
6. Acting in the role of contact for property owners or any other affected persons who wish to register observations of violations of project mitigation measures, or unsafe or dangerous conditions. Upon receiving any complaints, the inspector shall immediately contact the construction representative. The inspector shall be responsible for verifying any such observations and for developing any necessary corrective actions in consultation with the construction representative and the City of Elk Grove Public Works Department;
7. Maintaining prompt and regular communication with City staff;

MITIGATION MONITORING AND REPORTING PROGRAM

8. Obtaining assistance as necessary from technical experts, such as archaeologists and wildlife biologists, to develop site-specific procedures for implementing the mitigation measures adopted by the City for the Project; and
9. Maintaining a log of all significant interactions, violations of permit conditions or mitigation measures, and necessary corrective measures.

PLAN CHECK

Many mitigation measures will be monitored via plan check during Project implementation. City staff will be responsible for monitoring plan check mitigation measures.

MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

MM Number	Mitigation Measure	Timing/Implementation	Enforcement/Monitoring	Verification (date and Signature)
Initial Study Mitigation Measures:				
AIR-1	<p>The Project construction contractor shall provide a plan for approval by the SMAQMD demonstrating that the heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used in the construction of the Project, including owned, leased, and subcontractor vehicles, will achieve a Project-wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent California Air Resources Board fleet average. Acceptable options for reducing emissions may include use of late model engines (California Air Resources Board Tier 3 Certified or better¹), low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.</p>	<p>Plan shall be submitted to the SMAQMD for review and approval prior to improvement plans and shall be implemented during all grading and construction within the Project area</p>	<p>City of Elk Grove Planning Department; Sacramento Metropolitan Air Quality Management District</p>	
AIR-2	<p>The Project construction contractor shall ensure that emissions from all off-road diesel-powered equipment used do not exceed 40 percent opacity for more than 3 minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Noncompliant equipment shall be documented and a summary provided to the City Planning</p>	<p>During all grading and construction within the Project area</p>	<p>City of Elk Grove Planning Department; Sacramento Metropolitan</p>	

¹ NOx emissions are primarily associated with use of diesel-powered construction equipment (e.g., graders, excavators, rubber-tired dozers, tractor/loader/backhoes). The Clean Air Act of 1990 affected the EPA to study, and regulate if warranted, the contribution of off-road internal combustion engines to urban air pollution. The first federal standards (Tier 1) for new off-road diesel engines were adopted in 1994 for engines over 50 horsepower and were phased in from 1996 to 2000. In 1996, a Statement of Principles pertaining to off-road diesel engines was signed between the EPA, CARB, and engine makers (including Caterpillar, Cummins, Deere, Detroit Diesel, Deutz, Isuzu, Komatsu, Kubota, Mitsubishi, Navistar, New Holland, Wis-Con, and Yanmar). On August 27, 1998, the EPA signed the final rule reflecting the provisions of the Statement of Principles. The 1998 regulation introduced Tier 1 standards for equipment under 50 horsepower and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. As a result, all off-road, diesel-fueled construction equipment manufactured in 2006 or later has been manufactured to Tier 3 standards.

MITIGATION MONITORING AND REPORTING PROGRAM

MM Number	Mitigation Measure	Timing/Implementation	Enforcement/Monitoring	Verification (date and Signature)
GHG-1	<p>Department and the SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of construction, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed and the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this measure shall supersede other SMAQMD or state rules or regulations.</p> <p>Prior to building permit approval, the City of Elk Grove Planning Department shall require that the Project implement the following to reduce GHG emissions, based on the referenced measures from the City's Climate Action Plan:</p> <ul style="list-style-type: none"> a. The Project building shall achieve Tier 1 of Title 24, Part 1 green building standards to exceed minimum Title 24 energy efficiency standards by 15 percent, consistent with CAP Measure BE-6. b. The Project shall achieve Tier 1 of Title 24, Part 1 green building standards to required 65 percent waste diversion, consistent with CAP Measure RC-1. c. The Project shall include prewiring for solar photovoltaic (PV), consistent with CAP Measure BE-10. The proposed Project may also satisfy the intent of this mitigation by installing on-site solar PV systems. d. The Project shall provide an electric vehicle charging station for plug-in electric vehicles on-site, consistent with CAP Measure TACM-9. 	<p>Prior to final design, issuance of building permit</p>	<p>Air Quality Management District</p> <p>City of Elk Grove Planning Department</p>	

MITIGATION MONITORING AND REPORTING PROGRAM

MM Number	Mitigation Measure	Timing/Implementation	Enforcement/Monitoring	Verification (date and Signature)
NOI-1	<p>As part of the City's Design Review process for the proposed Project, the City shall require the following measures prior to initiation of Project construction:</p> <ul style="list-style-type: none"> • The pre-existing condition of any buildings within 25 feet of any construction activities shall be recorded in order to evaluate damage from project-related construction. Fixtures and finishes within a 25-foot radius of construction activities susceptible to damage shall be documented (photographically and in writing) prior to construction. • Should damage occur, construction operations shall be halted and the problem activity shall be identified. A qualified engineer shall establish vibration limits based on soil conditions and the types of buildings in the immediate area. The contractor shall monitor the buildings throughout the remaining construction period and follow all recommendation of the qualified engineer to repair any damage that has occurred to the pre-existing state and to avoid any further structural damage. 	Prior to and during construction activities	City of Elk Grove Planning Department	

**CERTIFICATION
ELK GROVE CITY COUNCIL RESOLUTION NO. 2015-057**

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

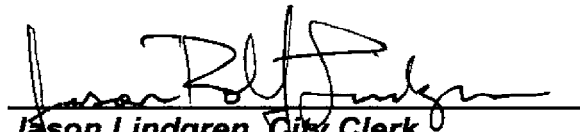
I, Jason Lindgren, City Clerk of the City of Elk Grove, California, do hereby certify that the foregoing resolution was duly introduced, approved, and adopted by the City Council of the City of Elk Grove at a regular meeting of said Council held on March 25, 2015 by the following vote:

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

NOES: COUNCILMEMBERS: None

ABSTAIN : COUNCILMEMBERS: None

ABSENT: COUNCILMEMBERS: None



**Jason Lindgren, City Clerk
City of Elk Grove, California**