

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

VINCI AVENUE BRIDGE IMPROVEMENTS PROJECT

CITY OF SACRAMENTO, CALIFORNIA



JUNE 2015



INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

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CITY OF SACRAMENTO, CALIFORNIA

Submitted to:

City of Sacramento
Community Development Department
Environmental Planning Services
300 Richards Boulevard, 3rd Floor
Sacramento, California 95811

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JUNE 2015



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City of
SACRAMENTO

COMMUNITY DEVELOPMENT
DEPARTMENT

ENVIRONMENTAL PLANNING
SERVICES

300 Richards Boulevard
Third Floor
Sacramento, CA 95811

MITIGATED NEGATIVE DECLARATION

The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

Vinci Avenue Bridge Improvements Project (T15125500) - The existing Vinci Avenue bridge (Bridge #24C0224) is a two-lane, two-span, reinforced concrete-slab bridge located approximately 0.35 miles east of the intersection of Vinci Avenue and Dry Creek Road. Constructed in 1970, the bridge carries Vinci Avenue over Magpie Creek diversion channel and ties back into Vinci Avenue through approximately 182 feet of non-native grassland habitat east of the bridge.

Improving the Vinci Avenue bridge will do the following: Increase the height of the bridge railing to meet City standards; Remove trucks from residential roads by connecting both sides of the bridge to Vinci Avenue therefore providing better access to Raley Boulevard and Interstate 80; and, Provide pedestrian facilities by widening shoulders on Vinci Avenue.

The Vinci Avenue bridge currently includes 30-inch metal beam guard rail barriers which do not meet the City standard safety recommendation of a minimum height of 42-inches. The proposed project will include installation of 42-inch concrete barriers. Additionally, since the bridge contains no shoulders, the project will also incorporate a 6-foot wide sidewalk on the south side of the bridge and a 1.66-foot wide concrete strip on the north side for pedestrian and maintenance purposes. Roadway improvements will also take place along Vinci Avenue. The proposed project will include the rehabilitation and extension of approximately 0.40 miles of paved road and will incorporate 5-foot widened shoulders.

The Lead Agency is the City of Sacramento. The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, with mitigation measures as identified in the attached Initial Study, will have a significant effect on the environment. This Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis. An Environmental Impact Report is not required pursuant to the Environmental Quality Act of 1970 (Sections 21000, et seq., Public Resources Code of the State of California).

This Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Sections 15000 et seq. of the California Code of Regulations), the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento, and the Sacramento City Code.

A copy of this document and all supportive documentation may be reviewed or obtained at the City of Sacramento, Community Development Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811 from 9:00 a.m. to 4:00 p.m. (or 8:00 a.m. to 5:00 p.m. with prior arrangement). The document is also available on the CDD website at:

<http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>

Environmental Services Manager, City of Sacramento,
California, a municipal corporation

By: Ellie English

Date: 5/28/15

VINCI AVENUE BRIDGE IMPROVEMENTS PROJECT (T15125500)

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION FOR ANTICIPATED SUBSEQUENT PROJECTS UNDER THE 2035 GENERAL PLAN MASTER EIR

This Initial Study has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*), CEQA Guidelines (Title 14, Section 15000 *et seq.* of the California Code of Regulations) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

SECTION I - BACKGROUND: Provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

SECTION II - PROJECT DESCRIPTION: Includes a detailed description of the proposed project.

SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION: Reviews proposed project and states whether the project would have additional significant environmental effects (project-specific effects) that were not evaluated in the Master EIR for the 2035 General Plan.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Identifies which environmental factors were determined to have additional significant environmental effects.

SECTION V - DETERMINATION: States whether environmental effects associated with development of the proposed project are significant, and what, if any, added environmental documentation may be required.

REFERENCES CITED: Identifies source materials that have been consulted in the preparation of the Initial Study.

SECTION I - BACKGROUND

Project Name and File Number: Vinci Avenue Bridge Improvements Project (T15125500)

Project Location: The Vinci Bridge Replacement project is located in the City of Sacramento, California. The existing bridge crosses Magpie Creek Diversion Channel approximately 0.35 mile east of the intersection of Vinci Avenue and Dry Creek Road.

Project Applicant: City of Sacramento

Project Planner: Adam Randolph, P.E., Associate Engineer
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Environmental Planner: Dana Mahaffey, Associate Planner
Community Development Department
Environmental Planning Services
300 Richards Blvd., 3rd Floor
Sacramento, CA 95835
Phone: (916) 808-2762
E-mail: dmahaffey@cityofsacramento.org

Date Initial Study Completed:

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 1500 *et seq.*). The Lead Agency is the City of Sacramento.

The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master EIR and is consistent with the land use designation and the permissible densities and intensities of use for the project site as set forth in the 2035 General Plan. See CEQA Guidelines Section 15176 (b) and (d).

The City has prepared the attached Initial Study to (a) review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the 2035 General Plan Master EIR to determine their adequacy for the project (see CEQA Guidelines Section 15178(b),(c)) and (b) identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the Master EIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR (CEQA Guidelines Section 15177(d)). The Master EIR mitigation measures that are identified as appropriate are set forth in the applicable technical sections below. Policies included in the 2035 General Plan that reduce significant impacts identified in the Master EIR are identified and discussed in the Master EIR.

This analysis incorporates by reference the general discussion portions of the 2035 General Plan Master EIR. (CEQA Guidelines Section 15150(a)). The Master EIR is available for public review at the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, and on the City's web site at: <http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>

The City is soliciting views of interested persons and agencies on the content of the environmental information presented in this document. Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but no later than the 30-day review period ending Friday, May 22, 2015.

Please send written responses to:

Dana Mahaffey
Community Development Department
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811
Direct Line: (916) 808-2762
dmahaffey@cityofsacramento.org

SECTION II - PROJECT DESCRIPTION

Introduction

This Initial Study with Proposed Mitigated Negative Declaration was prepared for the Vinci Avenue Bridge Improvements Project (project), located in the City of Sacramento, California (Figure 1 Project Location, Figure 2 Project Location, Figure 3 Project Features and Appendix A). The existing bridge crosses the Magpie Creek diversion channel approximately 0.35 miles east of the intersection of Vinci Avenue and Dry Creek Road. The project lies within the following: Township (T) 9North and Range (R) 5East, Sections 10 & 11 of the Rio Linda United States Geological Survey (USGS) 7 ½ Minute Quadrangles. The City of Sacramento (City) proposes to extend and connect Vinci Avenue to the existing bridge over Magpie Creek diversion channel and provide widened shoulders and rehabilitated pavement along existing Vinci Avenue. The proposed project would also entail the construction of new segments of roadway on both sides of the existing bridge for continuity of existing pavement. The City of Sacramento is the California Environmental Quality Act (CEQA) lead for this project.

Project Background

The existing Vinci Avenue Bridge has been closed for many years to traffic due to the substandard bridge width, lack of barrier railing and lack of approach roadway improvements. The Caltrans Bridge Inspection Report dated February 2014 for the existing bridge identifies a Sufficiency Rating (SR) of 97 and a status of “Not Deficient”, however the bridge currently has 30” metal railings, which are sub-standard to Caltrans recommendation of a minimum height of 42”. Vinci Avenue currently does not have consistent shoulders along the roadway or direct access to I-80 which causes truck traffic along residential roads and a deficiency in pedestrian continuity.

The City of Sacramento proposes to make interim improvements to both Vinci Avenue and Vinci Avenue bridge which will open the east-west bridge to traffic and provide better access to Raley Boulevard and Interstate 80 for truck traffic. It’s likely that the interim configuration would be in place for three to seven years before the federal project would implement improvements that would be fully compliant with City Standards.

PROJECT DESCRIPTION

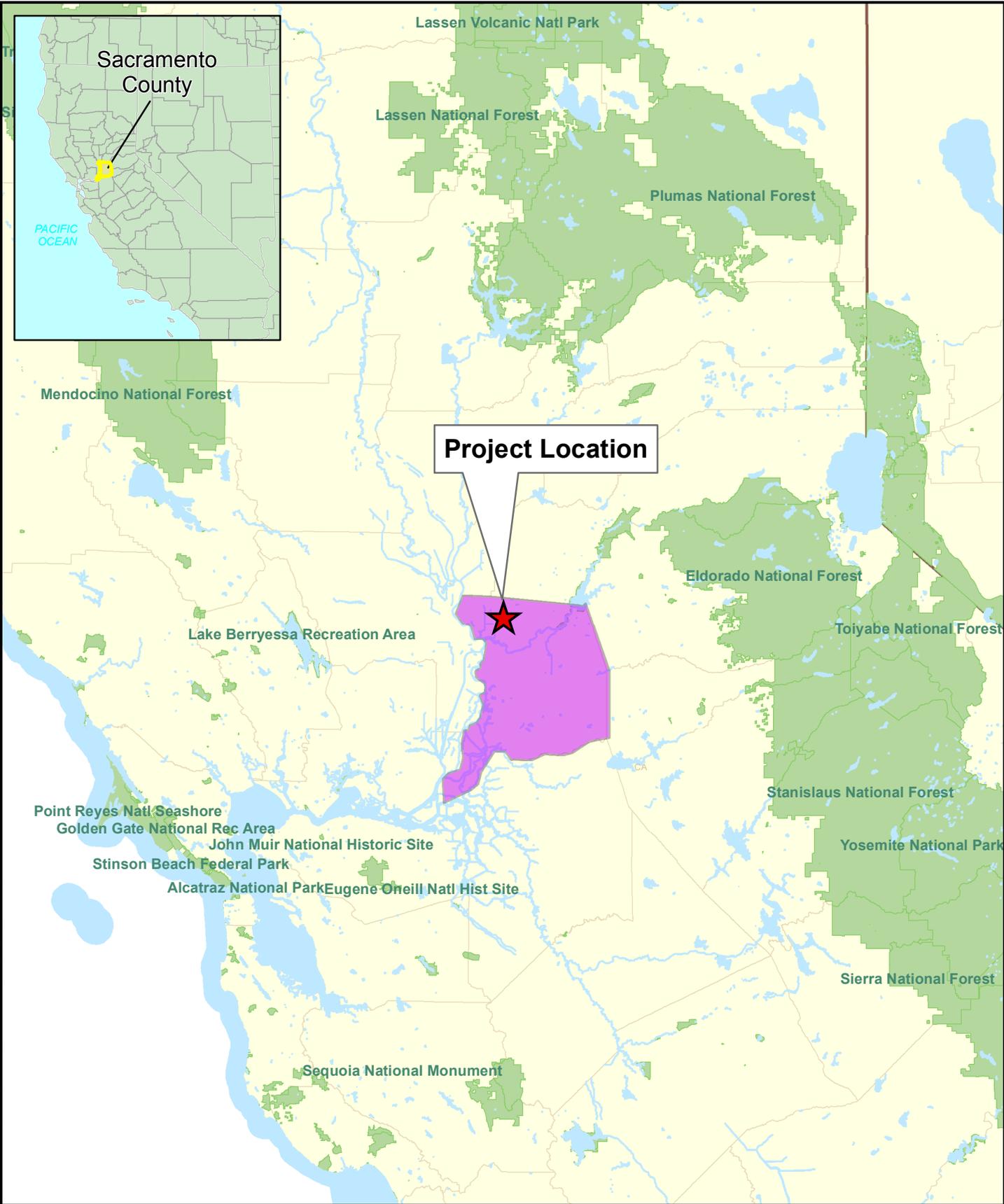
The existing Vinci Avenue bridge (Bridge #24C0224) is a two-lane, two-span, reinforced concrete-slab bridge located approximately 0.35 miles east of the intersection of Vinci Avenue and Dry Creek Road. Constructed in 1970, the bridge carries Vinci Avenue over Magpie Creek diversion channel and ties back into Vinci Avenue through approximately 182 feet of non-native grassland habitat east of the bridge.

Improving the Vinci Avenue bridge will do the following:

- Increase the height of the bridge railing to meet City standards;
- Remove trucks from residential roads by connecting both sides of the bridge to Vinci Avenue therefore providing better access to Raley Boulevard and Interstate 80;
- Provide pedestrian facilities by widening shoulders on Vinci Avenue.

The Vinci Avenue bridge currently includes 30-inch metal beam guard rail barriers which do not meet the City standard safety recommendation of a minimum height of 42-inches. The proposed project will include installation of 42-inch concrete barriers. Additionally, since the bridge contains no shoulders, the project will also incorporate a 6-foot wide sidewalk on the south side of the bridge and a 1.66-foot wide concrete strip on the north side for pedestrian and maintenance purposes. Roadway improvements will also take place along Vinci Avenue. The proposed project will include the rehabilitation and extension of approximately 0.40 miles of paved road and will incorporate 5-foot widened shoulders.

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Source: ESRI 2008; Dokken Engineering 3/18/2015; Created By: zachl

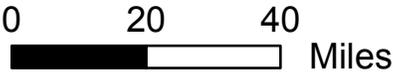
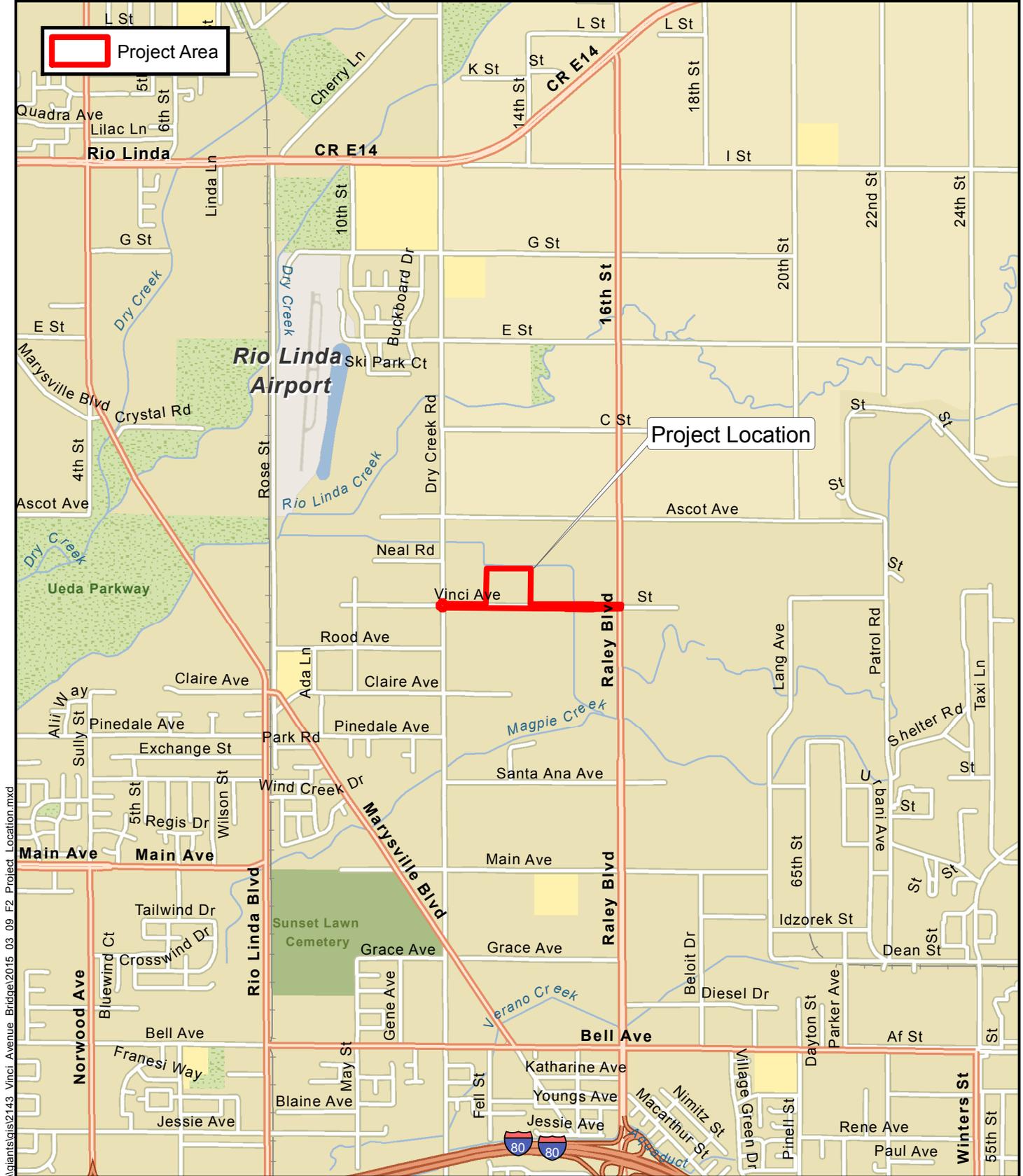


FIGURE 1
Project Vicinity
 Vinci Avenue Bridge Project
 City of Sacramento, Sacramento County, California



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Source: ESRI 2008; Dokken Engineering 3/18/2015; Created By: zachl

FIGURE 2

Project Location

Vinci Avenue Bridge Project
City of Sacramento, Sacramento County, California



 Project Area
 Project Linework



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Source: ESRI 2008; Dokken Engineering 4/8/2015; Created By: astorck



FIGURE 3
Project Features
 Vinci Avenue Bridge Project
 City of Sacramento, Sacramento County, California

Construction Access, Staging and Methods:

Project Access and Staging Areas

To allow equipment to access the project site, access would be through Dry Creek Road located to the west of the project area, and Raley Boulevard located to the east of the project area. Construction and equipment staging is proposed to be at a commercial business parking lot located at 1382 Vinci Avenue for the duration of the project. No vegetation is expected to be removed within the footprint of the proposed bridge.

Pavement construction for new roadway and shoulder widening will require excavations of less than 2' in depth. Additional excavation up to 6' in depth will be required in isolated locations for placement of drainage facilities. No additional capacity features, such as vehicle or bike lanes, will be constructed. Existing roadside ditches will be impacted by shoulder widening and new swales will be provided with inlets to convey drainage to the existing storm drain system along Vinci Avenue. The existing bridge will be modified by replacing the existing metal beam guard rail barrier with Type 26 concrete barrier rail. The Type 26 barrier will include a 6-foot sidewalk on the south side of the bridge and a 1.66-foot concrete strip on the north side. Traffic signs and striping will be installed to warn vehicles of the narrow bridge and roadway.

Anticipated Construction Equipment

Typical construction equipment would include the following:

- Crane
- Backhoe
- Excavator
- Concrete saw (removal of existing road and bridge)
- Cement truck
- Paver
- Rollers
- Motor grader
- Dump truck
- Light tools (ie. saws, jackhammer)

Most construction related noise would occur during the bridge and road improvements. This operation would likely include noise from concrete hammers and jackhammers. All construction work for the project will comply with the City of Sacramento Standard Construction Specifications (or Best Management Practices).

Utilities

Existing utilities within the project limits include natural gas, water, sewer, and telecommunications service. Natural gas is provided by Pacific Gas and Electric Company (PG&E). Sacramento Municipal Utility District (SMUD) is an overhead utility providing electricity. The City provides municipal water service within the project area, while Sacramento County Sacramento Regional County Sanitation District (SRCSD) provides wastewater collection (sewer) within the project area. Telecommunications services in the project area are provided by AT&T and Comcast. Minor relocation of utilities within the project area is anticipated. One SMUD vault will be relocated near the cul-de-sac on the east end of the project.

Permits

The permits, reviews and approvals listed below would be required for project construction.

Table 1. Required

Responsible Agency	Permit/Approval	Status
Regional Water Quality Control Board	National Pollutant Discharge Elimination System 402 General Permit for Storm Water Discharges Associated with Construction Activity	Will be obtained prior to construction.

Coordination Efforts:

A draft delineation of potential waters of the United States, including wetlands, and a draft Cultural Resources Survey and Inventory Report, was submitted to the City by ICF International for the Vinci Avenue Bridge Improvements project in February 2015. The proposed project currently falls under the Sacramento County area-wide municipal separate storm sewer system (MS4) permit to discharge storm water runoff from storm drains within the County jurisdiction, however, since the project area exceeds 1 acre, a National Pollutant Discharge Elimination System 402 General Permit for Storm Water Discharges Associated with construction activity will also be obtained prior to construction.

SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION

LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES AND ENERGY

Introduction

The California Environmental Quality Act (CEQA) requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed project and applicable general plans and regional plans.

An inconsistency between the proposed project and an adopted plan for land use development in a community would not constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the proposed project are discussed in the appropriate technical sections.

This section of the initial study identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed project. This section also discusses agricultural resources and the effect of the project on these resources.

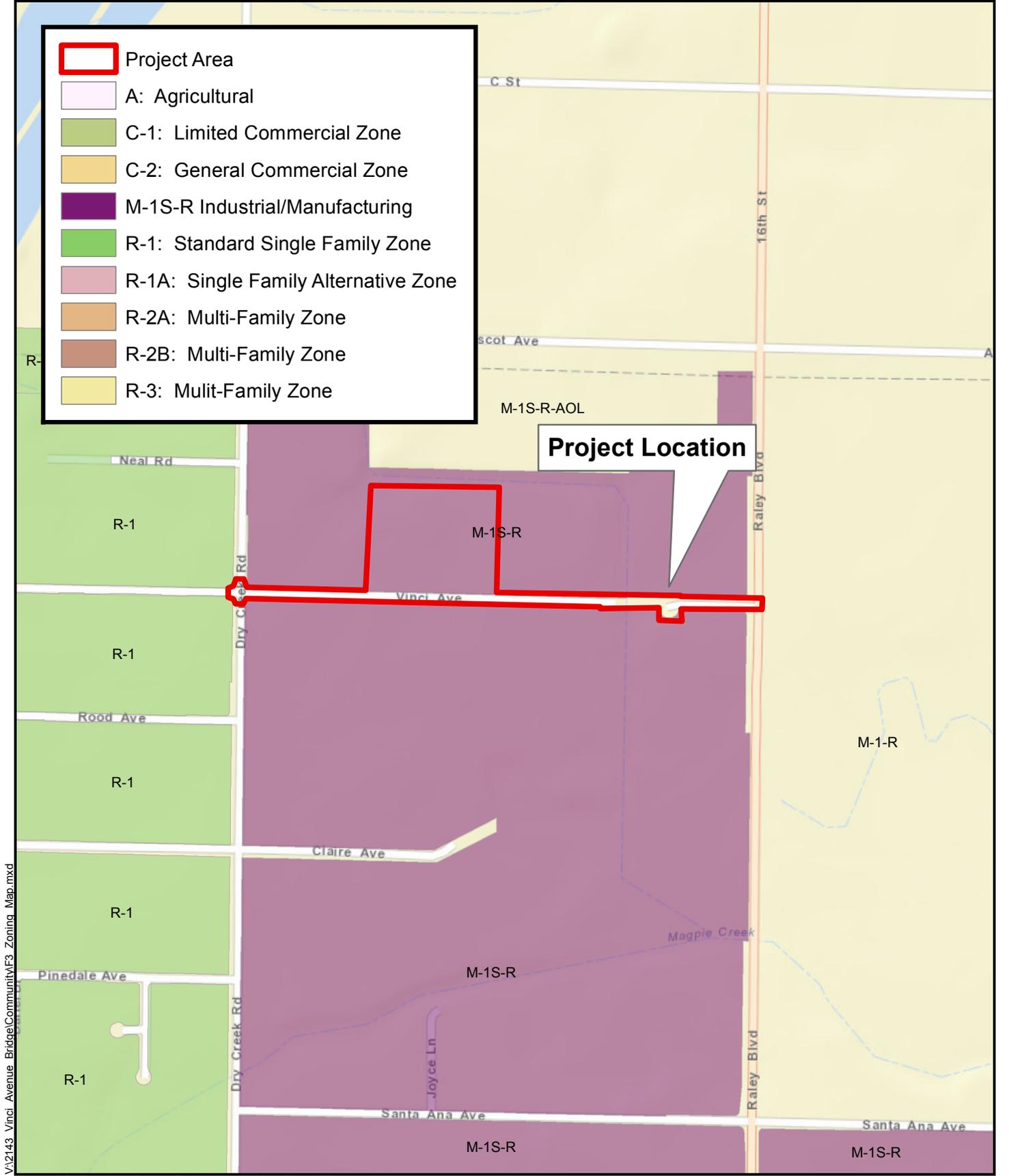
Discussion

Land Use

The project site has been designated as “Suburban Neighborhood Low” and “Industrial” in the 2035 General Plan, and is zoned M-1 Industrial and Manufacturing, and R-1 Standard Single Family. The project area is in the North Sacramento Community Plan Area (Figure 4).

The project site is located in an urbanized portion of the community. Vinci Avenue and Dry Creek Road are classified as “Collector” streets in the City of Sacramento 2035 General Plan and zoning code. The proposed project is consistent with the City of Sacramento General Plan as Vinci Avenue and Dry Creek Road will continue to be “collector” streets and the project would not change the zoning designation of adjacent areas. Because the project does not create new connections or access to new areas, no impacts to growth, economics, affordable housing, or crime would occur. Development of the site as proposed would alter the existing landscape, but the project site has been designated for urban development in the 2035 General Plan and the Planning and Development Code, and the proposed development is consistent with these planning designations.

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V:\2143 Vinci Avenue Bridge\Community\F3 Zoning_Map.mxd

Source: USA Topo Map; Dokken Engineering 4/9/2015; Created By: astorck

FIGURE 4
Zoning

Vinci Avenue Bridge Improvements Project
City of Sacramento, California



0 480 960 1,440 1,920 Feet

Agricultural Resources

The Master EIR discussed the potential impact of development under the 2035 General Plan on agricultural resources. See Master EIR, Chapter 6.2. In addition to evaluating the effect of the general plan on sites within the City, the Master EIR noted that to the extent the 2035 General Plan accommodates future growth within the City limits, the conversion of farmland outside the City limits is minimized. (Master EIR, page 6.2-13) The Master EIR concluded that the impact of the 2035 General Plan on agricultural resources within the City was less than significant.

The project site does not contain soils designated as Important Farmland (i.e., Prime Farmland, Unique Farmland or Farmland of Statewide Importance). (NRCS 2010) The site is not zoned for agricultural uses, and there are no Williamson Act contracts that affect the project site. No existing agricultural or timber-harvest uses are located on or in the vicinity of the project site. Development of the site would result in no impacts on agricultural resources.

Energy

Structures built as part of the project would be subject to Titles 20 and 24 of the California Code of Regulations, which serve to reduce demand for electrical energy by implementing energy-efficient standards for residential and non-residential buildings. The 2035 General Plan includes policies (see Policies 6.1.10 through 6.1.13) to encourage the spread of energy-efficient technology by offering rebates and other incentives to commercial and residential developers, and recruiting businesses that research and promote energy conservation and efficiency.

Policies 6.1.6 through 6.1.8 focus on promoting the use of renewable resources, which would reduce the cumulative impacts associated with use of non-renewable energy sources. In addition, Policies 6.1.5 and 6.1.12 call for the City to work closely with utility providers and industries to promote new energy conservation technologies.

The Master EIR evaluated the potential impacts on energy and concluded that the effects would be less than significant. (See Impacts 6.11-9 and 6.11-10) The proposed project would not result in any impacts not identified and evaluated in the Master EIR.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
1. <u>AESTHETICS, LIGHT AND GLARE</u> Would the proposal:			X
A) Create a source of glare that would cause a public hazard or annoyance?			
B) Create a new source of light that would be cast onto oncoming traffic or residential uses?			X
C) Substantially degrade the existing visual character of the site or its surroundings?			X

ENVIRONMENTAL SETTING

The project site is located in an urbanized portion of the community. Development of the site as proposed would alter the existing landscape. Vinci Avenue and Dry Creek Road are classified as “Collector” streets in the City of Sacramento 2035 General Plan and zoning code. The proposed project is consistent with the City of Sacramento General Plan as Vinci Avenue and Dry Creek Road will continue to be “collector” streets and the project would not change the zoning designation of adjacent areas. Because the project does not create new connections or access to new areas, no impacts to growth, economics, affordable housing, or crime would occur.

STANDARDS OF SIGNIFICANCE

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to aesthetics would occur if the project would:

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

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR described the existing visual conditions in the general plan policy area, and the potential changes to those conditions that could result from development consistent with the 2035 General Plan. See Master EIR, Chapter 6.13, Urban Design and Visual Resources.

The Master EIR identified potential impacts for glare (Impact 6.13-1). Mitigation Measure 6.13-1, set forth below, was identified to reduce the effect to a less-than-significant level.

Light cast onto oncoming traffic or residential uses was identified as a potential impact (Impact 6.13-2). The Master EIR identified Policy LU 6.1.14 (Compatibility with Adjoining Uses) and its requirement that lighting must be shielded and directed downward as reducing the potential effect to a less-than-significant level.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A AND B

The project would not create a source of glare that would cause a public hazard or annoyance. While the improved bridge and road would have a widened surface, this widening would not be substantial enough to create a new source of reflective daytime or nighttime glare. The roadway and bridge surfaces would be of materials typically seen by drivers. No substantially reflective surfaces are proposed. Project implementation would require that existing vegetation be removed along the existing roadway within the project area to allow for the street improvements, thereby increasing the effects of glare and reducing the available shade for roadway surfaces. However, the project would not include the construction of structures that could reflect or concentrate sunlight, thereby increasing glare.

The project would not create a substantial new source of light that would be cast onto oncoming traffic or residential uses. No new street lights would be added to the extended street or along Vinci Avenue.

These impacts would be less than significant. Therefore, the proposed project would not result in additional significant impacts on light and glare that were not addressed or considered in the Master EIR.

QUESTION C

The MEIR for the 2035 General Plan allows for periodic maintenance on established collector streets, such as Vinci Avenue, therefore the project will not substantially degrade the existing visual character of the site or its surroundings.

FINDINGS

The project would have no additional project-specific environmental effects relating to Aesthetics.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
2. AIR QUALITY			
<i>Would the proposal:</i>			
A) Result in construction emissions of NO _x above 85 pounds per day?			X
B) Result in operational emissions of NO _x or ROG above 65 pounds per day?		X	
C) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X
C) Result in PM ₁₀ concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard?			X
E) Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?			X
F) Result in exposure of sensitive receptors to substantial pollutant concentrations?			X
G) Result in TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?			X
H) Conflict with the Climate Action Plan?			X

For purposes of this Initial Study, air quality impacts may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- construction emissions of NO_x above 85 pounds per day;
- operational emissions of NO_x or ROG above 65 pounds per day;
- violation of any air quality standard or contribute substantially to an existing or projected air quality violation;

- PM₁₀ concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard. However, if project emissions of NO_x and ROG are below the emission thresholds given above, then the project would not result in violations of the PM₁₀ ambient air quality standards;
- CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm); or
- exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

A project is considered to have a significant effect relating to greenhouse gas emissions if it fails to satisfy the requirements of the City's Climate Action Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR addressed the potential effects of the 2035 General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthy pollutant concentrations. See Master EIR, Chapter 6.1.

Policies in the 2035 General Plan in Environmental Resources were identified as mitigating potential effects of development that could occur under the 2035 General Plan. For example, Policy ER 6.1.1 calls for the City to work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet state and federal air quality standards; Policy ER 6.1.12 requires the City to review proposed development projects to ensure that the projects incorporate feasible measures that reduce construction and operational emissions; Policy ER 6.1.11 calls for coordination of City efforts with SMAQMD; and Policy ER 6.1.15 requires the City to give preference to contractors using reduced-emission equipment.

The Master EIR identified exposure to sources of toxic air contaminants (TAC) as a potential effect. Policies in the 2035 general Plan would reduce the effect to a less-than-significant level. The policies include ER 6.1.5, requiring consideration of current guidance provided by the Air Resources Board and SMAQMD; requiring development adjacent to stationary or mobile TAC sources to be designed with consideration of such exposure in design, landscaping and filters; as well as Policies ER 6.11.1 and ER 6.11.15, referred to above.

The Master EIR found that greenhouse gas emissions that would be generated by development consistent with the 2035 General Plan would be a significant and unavoidable cumulative impact. The discussion of greenhouse gas emissions and climate change in the 2035 General Plan Master EIR are incorporated by reference in this Initial Study. (CEQA Guidelines Section 15150)

The Master EIR identified numerous policies included in the 2035 General Plan that addressed greenhouse gas emissions and climate change. See Draft MEIR, Chapter 8, and pages 8-49 et seq. The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at <http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>

Policies identified in the 2035 General Plan include directives relating to sustainable development patterns and practices, and increasing the viability of pedestrian, bicycle and public transit modes. A complete list of policies addressing climate change is included in the Master EIR in Table 8-5, pages 8-50 et seq; the Final MEIR included additional discussion of greenhouse gas emissions and climate change in response to written comments. See changes to Chapter 8 at Final MEIR pages 2-19 et seq. See also Letter 2 and response.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

The proposed project would have short-term impacts resulting from the following construction-related sources: 1) construction and demolition equipment emissions; 2) dust from construction operations; and 3) emissions from construction vehicles.

As shown in Table 2, the project is located in an area in nonattainment for 1-hour Ozone for State standards, nonattainment for 8-hour Ozone for both Federal and State standards, and nonattainment for Particulate Matter under 2.5 micrometers for Federal standards and State standards.

Table 2. Attainment at Project Location

Criteria Pollutant	Attainment Status	
	Federal	State
O ₃ – 1-hour	N/A	Nonattainment - Serious
O ₃ – 8-hour	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Nonattainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Unclassified/Attainment	Attainment
NO ₂	Unclassified/Attainment	Attainment
SO ₂	Unclassified	Attainment
Sulfates	N/A	Attainment
Lead	Attainment	Attainment
Hydrogen Sulfide	N/A	Unclassified
Visibility Reducing Particles	N/A	Unclassified

Source: California Air Resources Board, 2013.

Temporary/Construction Impacts

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and would include CO, NO_x, volatile organic compounds (VOCs), directly-emitted particulate matter

(PM₁₀ and PM_{2.5}), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO_x and VOCs in the presence of sunlight and heat.

Heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, VOCs and some soot particulate (PM₁₀ and PM_{2.5}) in exhaust emissions. If construction activities were to increase traffic congestion in the project area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site and detour area. The estimated construction related emissions of NO_x is 69.3 lbs/day, which is well under the 85 lbs/day threshold (see Appendix B for the Air Quality Model Results).

Dust generated will result in a temporary, local impact, limited to areas of construction. Dust control practices will be incorporated into the project to mitigate this potential impact. The dust control practices will comply with the current City Code: 15.40.050 and 15.44.170; SMAQMD Rule 403 (Fugitive Dust) and their Basic Construction Emissions Control Practices. The general requirements of Rule 403 are:

301 Limitations: A person shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:

301.1 Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land.

301.2 Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;

301.3 Other means approved by the Air Pollution Control Officer.

Table 3. Construction Emissions (pounds per day)

Phase	ROGs	CO	NO _x	PM ₁₀	Exhaust PM ₁₀	Fugitive Dust PM ₁₀
Grubbing/Land Clearing	1.7	9.7	16.9	10.8	0.8	10.0
Grading/Excavation	6.8	34.0	69.3	13.4	3.4	10.0
Drainage/Utilities/Sub-Grad	5.8	28.3	51.0	13.0	3.0	10.0
Paving	2.1	11.5	17.5	1.1	1.1	-
Maximum (pound/day)	6.8	34.0	69.3	13.4	3.4	10.0
Total (tons/construction project)	0.2	0.9	1.6	0.4	0.1	0.3

Source: Road Construction Emissions Model, Version 7.1.5.1

Permanent Impacts

The proposed project is not anticipated to change traffic volumes on Vinci Avenue. Under federal requirements, the project was found exempt from all project-level conformity requirements because it falls under exempt projects (widening narrow pavements or reconstructing bridges [no additional travel lanes]) listed in 40 CFR 93.126. To further reduce temporary project specific impacts, implementation of Basic Construction Emissions Control Practices will occur.

QUESTIONS B AND E

Because the proposed project would not increase the capacity of the roadway, no additional trips or delays are expected to result from the project. Therefore, the project is not anticipated to result in increased operational emissions. To ensure that the proposed project does not increase traffic congestion and increase air quality impacts, the following Best Management Practice (BMP) would be included to avoid construction related traffic congestion: Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.

QUESTION C

Because construction and operational emissions are expected to be well below the thresholds, as discussed for Questions A and B, the project is not expected to violate any air quality standards. The proposed project would not increase the capacity of the roadway, no additional trips or delays are expected to result from the project. The proposed project would not exceed the threshold for NO_x (85 lbs/day) (see Table 3 for all of the proposed construction emissions). The proposed project would not result in additional significant impact that was not addressed in the Master EIR.

QUESTION D

SMAQMD has established screen-level criteria for the assessment of significant impacts from construction-related emissions of fugitive dust. These criteria are based on a project's maximum actively disturbed area. Construction activities that would disturb less than 15.0 acres per day would be required to implement the appropriate level of mitigation, identified by the SMAQMD as "Basic Construction Emission Control Practices," for all projects to further minimize construction-related impacts regardless of the CEQA significance determination. Because the proposed project covers an area less than 15 acres, BMPs have been included from the "Basic Construction Emission Control Practices" to reduce construction-related emissions of fugitive dust. See Question A for the City Code: 15.40.050 and 15.44.170; SMAQMD Rule 403 (Fugitive Dust) and their Basic Construction Emissions Control Practices.

PM₁₀ emissions are assumed to be below the thresholds because as discussed for Question A Construction NO_x emissions are below the thresholds. There are no construction ROG thresholds, and both NO_x and ROG operational thresholds are not expected to be exceeded. Therefore, the proposed project would not result in an additional significant impact that was not addressed in the Master EIR.

QUESTIONS F AND G

Although the nearest sensitive receptor is located approximately 30 feet from the roadway improvement project area along Vinci Avenue, construction activities, which involve the use of diesel-powered equipment, are short-term and emissions are expected to be well below the thresholds. Operational emissions are not expected to increase, as discussed for Question B. Despite a low-impact expectation for this project, measures for construction activities are still recommended to further reduce impacts on sensitive receptors.

SMAQMD defines sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants or may experience adverse effects from unhealthful concentrations of air pollutants. Hospitals,

clinics, schools, convalescent facilities, and residential areas are examples of sensitive receptors. The nearest sensitive receptors in the vicinity of the project site are residences approximately 30 feet south of the project site.

Construction activities are anticipated to involve the operation of diesel-powered equipment. In 1998, the CARB identified diesel exhaust as a TAC. Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 70-year exposure period often is assumed. Although elevated cancer rates can result from exposure periods of less than 70 years, acute exposure (i.e., exposure periods of 2 to 3 years) to diesel exhaust typically are not anticipated to result in an increased health risk because acute exposure typically does not result in exposure concentrations that would represent a health risk. Health impacts associated with exposure to diesel exhaust from project construction are not anticipated to be significant because construction activities are expected to occur well below the 70-year exposure period used in health risk assessments. Therefore, construction of the project is not anticipated to result in an elevated cancer risk to exposed persons. No mitigation is required. Therefore, the proposed project would not result in an additional significant impact that was not addressed in the Master EIR.

QUESTION H

As part of its action in approving the 2035 General Plan, the City Council certified the Master EIR that evaluated the environmental effects of development that is reasonably anticipated under the new General Plan. The Master EIR includes extensive discussion of the potential effects of greenhouse gas emissions. The Master EIR discussions regarding climate change are incorporated here by reference. See, for example:

Draft EIR: 6.1 Air Quality (Page 6.1-1)

Final EIR: City Climate Change Master Response (Page 4-1)

Errata No. 2: Climate Change (Page 12)

These documents are available at www.cityofsacramento.org/dsd/planning/environmental-review/eirs/ and at the offices of Community Development Department at 300 Richards Boulevard, Third Floor, Sacramento, California.

The proposed project is consistent with the land use designation for the project site. The project would result in the generation of greenhouse gases during construction and operation, as discussed below.

Short-term Construction Emissions

During construction of the proposed project, GHG emissions would be emitted from the operation of construction equipment and from worker supply vendor vehicles. Road Construction Emissions modeling was conducted to estimate the total CO₂ emissions generated by the construction of the project. The total CO₂ emissions would be approximately 6,952.6 pounds per day during the construction of the project. The results of the modeling for CO₂ are in Appendix B.

Long-term Construction Emissions

Because the proposed project consists of road and bridge improvements, and does not increase capacity of the roadway, there are no long-term operational activities associated with the

project. The project would not lead to changes in vehicular operations and associated emissions. While there may be maintenance visits to the project site, these visits are expected to be infrequent, and occur for emergency repair or for repaving, which occurs after the lifetime of the installed pavement has been reached. Long term operational emissions are thus expected to be negligible.

Ongoing Activities

The 2035 General Plan includes a Climate Action Plan for the City. The Climate Action Plan provided additional guidance for the City's ongoing efforts to reduce GHG emissions. For instance, the Climate Action Plan includes seven strategies and 31 measures to reduce GHG emissions.

To prevent the continued escalation of GHG emissions, the Climate Action Plan establishes a 2020 target (15 percent below 2005 levels) and 2030 and 2050 goals (38 percent and 83 percent below 2005 levels, respectively) to reduce annual emissions levels consistent with state laws and guidelines. According to the Climate Action Plan, the actions that could be quantified along with those that could not outline a path to meet the City's 2020 reduction target, consistent with state laws and guidelines. When combined with quantified state and federal legislative reductions, primary actions contained in the Climate Action Plan offer a potential reduction of about 1.37 million metric tons of carbon dioxide equivalent (CO₂e) annually. This level of reduction exceeds the City's 2020 target of 15 percent by 6,227 metric tons of CO₂e, and is consistent with state laws.

In addition to the Climate Action Plan, GHG-reduction strategies continue at the state and federal level to combat climate change. In December 2009, the EPA listed GHG as harmful emissions under the Clean Air Act. This action could eventually result in regulations with a purpose of reducing such emissions.

The Master EIR concluded that GHG emissions that could be emitted by development that is consistent with the 2035 General Plan would be cumulatively considerable and unavoidable (Errata No. 2, Page 12). The Master EIR includes a full analysis of GHG emissions and climate change, and adequately addresses these issues. As indicated in the Master EIR, future development within the City of Sacramento will be required to comply with Assembly Bill (AB) 32 and with the Sacramento Area Council of Governments (SACOG) 2035 Metropolitan transportation Plan (MTP). The 2035 MTP is anticipated to meet the AB 32 goal of reaching 1990 transportation emissions by 2020. However, the City will need to reduce emission in other planning areas for the city as a whole to meet AB 32 goals. The City is anticipating an increase in GHG emission without the incorporation of reduction measures.

The proposed project must comply with the 2035 General Plan policies and measures for the reduction of GHGs to comply with the 2035 MTP and AB 32. Because the traffic from the proposed project was assumed in the 2035 MTP, and the 2035 MTP is anticipated to meet the goals of AB 32, the proposed project would comply with the 2035 MTP. AB 32 requires an approximate 29 percent reduction from existing emissions on a statewide level in order to achieve the goal of reducing GHG emissions to 1990 levels by 2020. In order for this to occur, the existing and future operations of the City, as well as individual land uses, must reduce their emissions accordingly.

The MEIR for the 2035 General Plan allows for periodic maintenance on established collector streets, such as Vinci Avenue, therefore the GHG emissions increase that would occur with

implementation of the project has been accounted for in the General Plan. The project would not impede the City's efforts to comply with AB 32 requirements. Therefore, the projects cumulative impacts related to construction and operation of the proposed project conflicting with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions would be less than significant. The project would not have any significant additional environmental effects relating to GHG emissions or climate change.

MITIGATION MEASURES

AQ-1: Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.

AQ-2: Sacramento Metropolitan Air Quality Management District's Rule 403 - Fugitive Dust would be followed. The general requirements of Rule 403 are: 301 Limitations: A person shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:

301.1 Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land.

301.2 Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;

301.3 Other means approved by the Air Pollution Control Officer.

AQ-3: Basic Construction Emission Control Practices

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel powered equipment. The California Air Resources Board enforces the idling limitations.

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

Findings

All additional significant environmental effects of the project relating to Air Quality can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
2. BIOLOGICAL RESOURCES			
Would the proposal:			
A) Create a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected?			X
B) Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal species?		X	
C) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?		X	

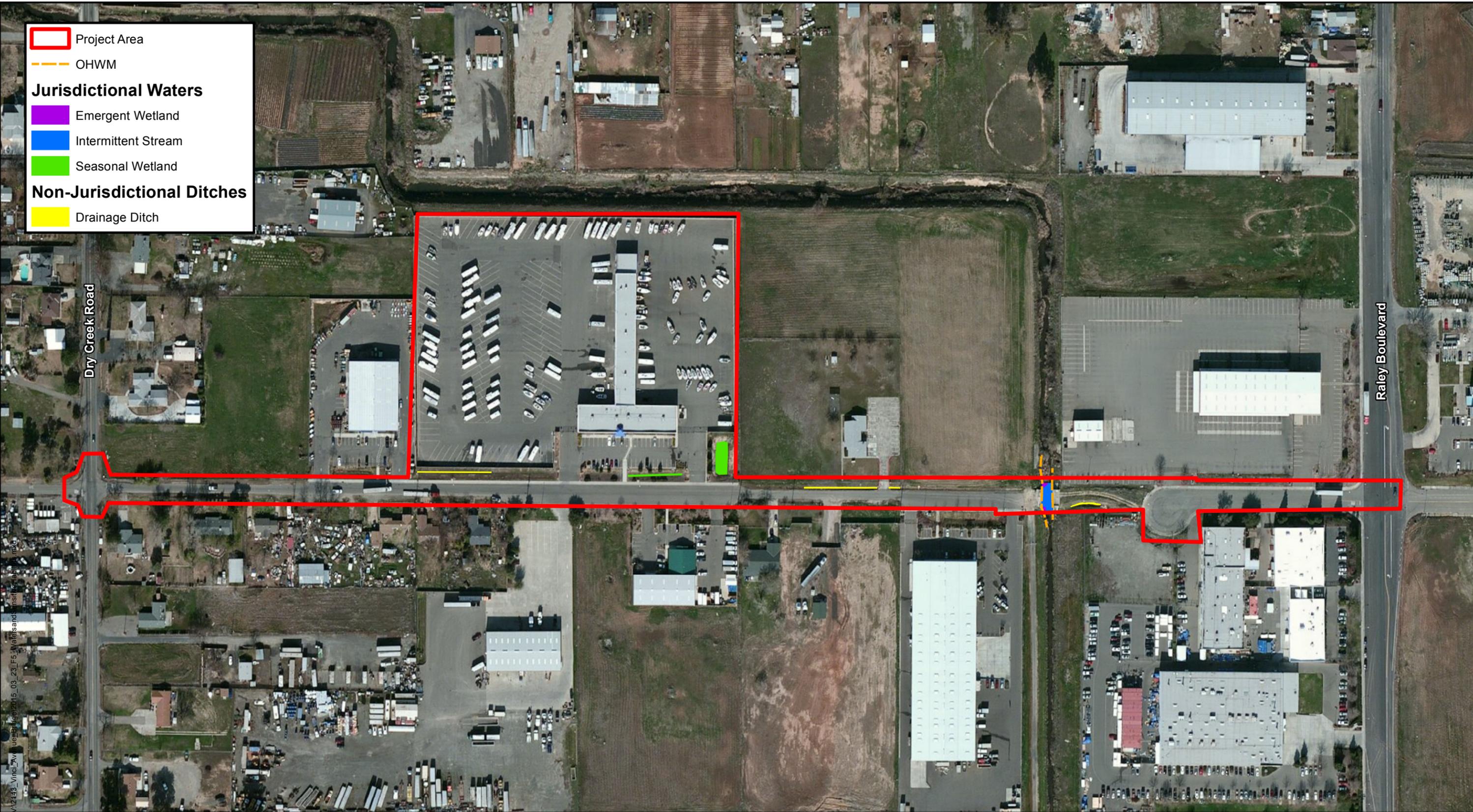
ENVIRONMENTAL SETTING

The project site consists of non-native grassland, urban and developed areas, and great valley-willow scrub. With the exception of a small portion of the project containing native wetland/riparian scrub vegetation, much of the project area is either developed or greatly disturbed as the project area contains several commercial and industrial use businesses, a frequently maintained cement lined creek channel, and ruderal vegetation. The commercial and industrial developments along the project consist of hardscape, compacted soils, and disturbed native and non-native vegetation. Much of the vegetation within the project area (Figure 5 Waters and Sensitive Habitats) is disturbed due to urbanization and industrial use which have degraded the native vegetative communities and associated habitat. The project occurs within the Sacramento Valley floristic region and USFS ecological subsection 262Ag (Hardpan Terraces), which is a geologically characterized by low hills and alluvial plains.

Dokken Engineering carried out a preliminary database search and a biological survey of the project area on March 19, 2015 to characterize the environmental setting on and adjacent to the project. The preliminary database searches were performed to identify special-status species with the potential to occur within the project area. A second biological survey was conducted on Friday, March 20, 2015, by Dokken Engineering, to collect site-specific data regarding habitat suitability for special-status species, as well as identification of potentially jurisdictional waters.

A literature research was conducted through the USFWS Planning Species List, CDFW, CNDDDB and the CNPS Electronic Inventory of Rare and Endangered Plants to identify habitats and special-status species having the potential to occur within the project area for Rio Linda USGS 7.5-minute quadrangle (Figure 2 Project Features and Figure 6 Vegetation Communities).

- Project Area
- OHWM
- Jurisdictional Waters**
- Emergent Wetland
- Intermittent Stream
- Seasonal Wetland
- Non-Jurisdictional Ditches**
- Drainage Ditch



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Source: ESRI 2008; Dokken Engineering 4/9/2015; Created By: astorck

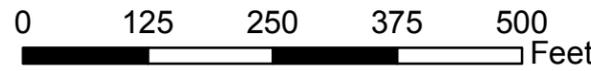
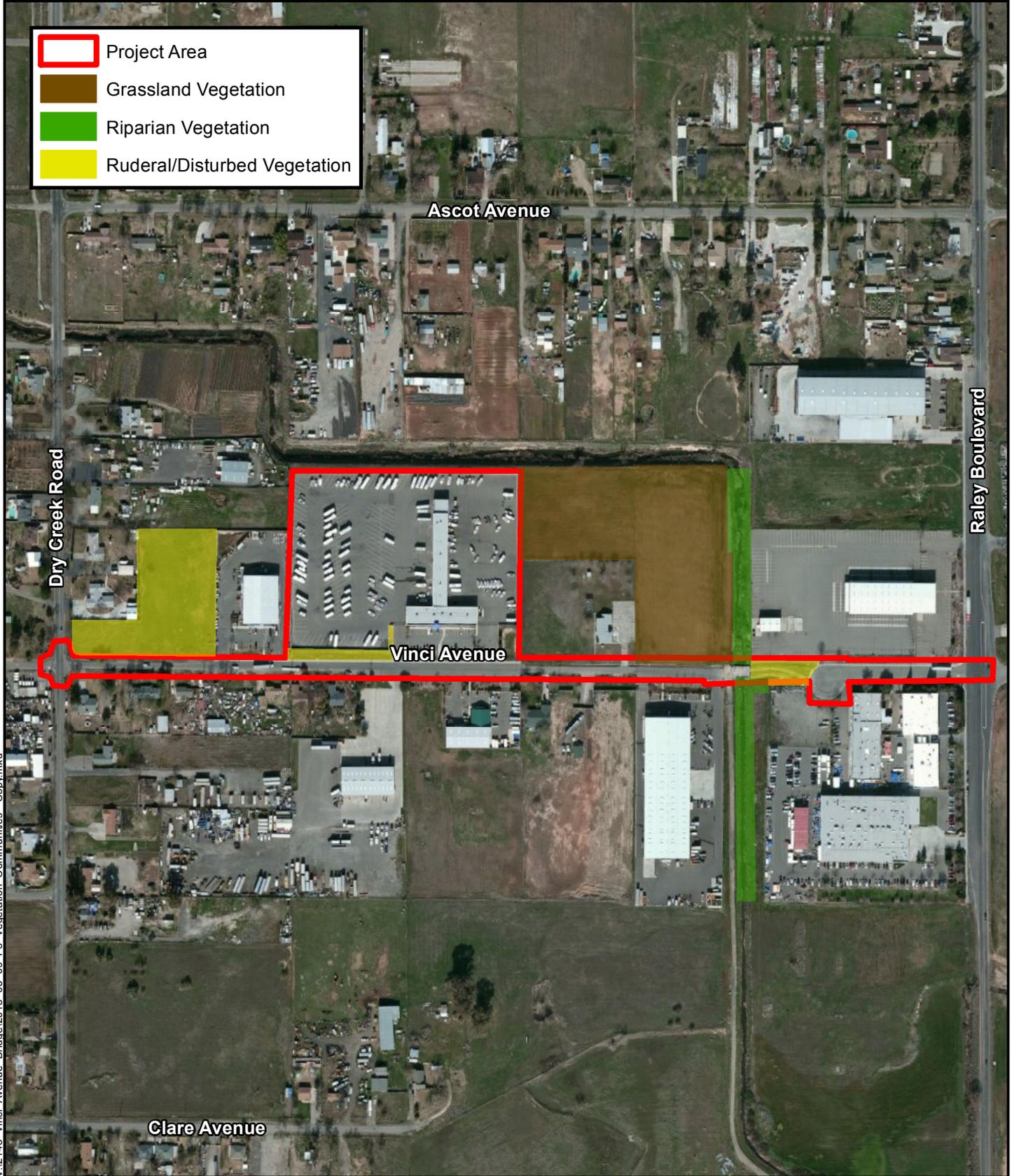


FIGURE 5
Waters and Sensitive Habitats
 Vinci Avenue Bridge Project
 City of Sacramento, Sacramento County, California

- Project Area
- Grassland Vegetation
- Riparian Vegetation
- Ruderal/Disturbed Vegetation



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Source: ESRI 2008; Dokken Engineering 4/8/2015; Created By: astorck



FIGURE 6
Vegetation Communities
 Vinci Avenue Bridge Project
 City of Sacramento, Sacramento County, California

These database searches identified special-status species within the USFWS jurisdiction that may be affected by the proposed project. In addition, a query of the USFWS's Critical Habitat Portal was conducted to identify potential critical habitat designations within the vicinity of the project. A query of the CNDDDB database provided a list of known occurrences for special-status species. The CNPS database search purpose was to identify special-status plant species with the potential to occur within the Rio Linda, California USGS 7.5-minute quadrangle (Appendix C).

Sensitive Habitats

Sensitive habitats include sensitive natural plan communities and other habitats designated and/or regulated by California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and U.S. Army Corps of Engineers (USACE). Under Section 404 of the Clean Water Act (CWA), wetlands and other waters of the U.S. are subject to the jurisdiction of USACE. Aquatic habitats may also receive protection under California statutes including Section 1602 of the California Fish and Wildlife Code and the California Porter-Cologne Water Quality Control Act.

Special-Status Species

Special-status species are plants and animals in the following categories:

- Species that are listed under the federal Endangered Species Act (ESA) and/or California Endangered Species Act (CESA) as rare, threatened, or endangered;
- Species considered as candidates and proposed for state or federal listing as threatened or endangered;
- Wildlife designated by CDFW as species of special concern; and
- Plants ranked by CDFW as "rare, threatened, or endangered" in California.

The California Natural Diversity Database (CNDDDB), maintained by the CDFW, is considered as the most current and reliable tool for tracking occurrences of special-status species in California.

Special-Status Species Evaluation

The special-status species evaluation considers those species identified as having relative scarcity and/or declining populations by the USFWS or CDFW. Special-status species include those formally listed as threatened or endangered, those proposed for formal listing, candidates for federal listing, and those classified as Species of Concern by USFWS or Species of Special Concern by CDFW. Species considered to be "special animals" or "fully protected" by the CDFW or rare, threatened, or endangered in California by the California Native Plant Society (CNPS) were also included in the evaluation.

Regulatory Setting

The following city, State, and federal statutes pertain to the proposed project:

- National Environmental Policy Act (42 USC 4321 et seq.)
- Federal Endangered Species Act (16 USC 1531-1543)
- Section 404 of the Clean Water Act (33 USC 1251-1376)
- Fish and Wildlife Coordination Act (16 USC 661-6660)
- Executive Order 11990, Protection of Wetlands (May 24, 1977)
- Migratory Bird Treaty Act of 1918 (USC 703-711)
- California Environmental Quality Act (PRC 21000 et seq.)
- California Endangered Species Act (CDFW Code 2050 et seq.)
- Native Plant Protection Act (CDFW Code 1900-1913)

- City of Sacramento Heritage Tree Ordinance (SCC Section 12.64.10-12.64.70)
- City of Sacramento Street Tree Ordinance (SCC Section 12.56.10-12.56.170)

Federal Endangered Species Act

The Federal Endangered Species Act defines ‘take’ (Section 9) and prohibits ‘taking’ of a listed endangered or threatened species (16 USC 1532, 50 CFR 17.30. If a federally listed species could be harmed by a project, Section 7 or 7 consultations must be initiated, and an Incidental Take Permit must be obtained (16 USC 1539, 50 CFR 13).

Federal Migratory Bird Treaty Act

Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10 including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All migratory bird species are protected by the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a ‘take’ of the species under federal law.

Setting and Methods

Queries of the USFWS Planning Species list, CNDDDB Electronic Inventory of Rare and Endangered Plants, and CNPS database queries identified several special-status species with the potential to be impacted by the proposed project. Field surveys were conducted in March 2015 to document existing biological resources, detect potential jurisdictional waters of the U.S. and State, and search for suitable habitat and presence of Federal and State protected species. Potential impacts to resources were analyzed based on the proposed project design and ecological resources identified in the field surveys. Table 4 provides a summary of all species identified in the search results, a description of the habitat requirements for each species, and conclusions regarding the potential for each species to occur within the project area.

Table 4: Special-Status Species with Potential to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Potential for Occurrence and Rationale
Plant Species				
Dwarf downingia	<i>Downingia pusilla</i>	Fed: -- CA: -- CNPS: 2.2	An annual herb inhabiting vernal pools and mesic valley and foothill grassland communities. Flowers March-May (3-1,460 feet).	Presumed Absent; The project area lacks the species’ requisite vernal pools and mesic grassland community; habitat unsuitable for dwarf downingia.
Stinkbells	<i>Fritillaria agrestis</i>	Fed: -- CA: -- CNPS: 4.2	A perennial bulb inhabiting clay, often serpentine, banks and depressions of chaparral, cismontane woodland, and valley and foothill grassland communities. Flowers March-June (33-5,102).	Presumed Absent; Soils within the project vicinity are loams and the project area lacks requisite clay and serpentine soils; habitat unsuitable for stinkbells.
Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>	Fed: -- CA: E	An annual herb inhabiting clay soils and shallow waters of	Presumed Absent; Soils within the project vicinity are

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Common Name	Scientific Name	Status	General Habitat Description	Potential for Occurrence and Rationale
		CNPS: 1B. 2	marshes and swamps, lake margins, and vernal pools. Flowers April-August (33-7792 feet).	loams and the project area lacks requisite clay soils; habitat unsuitable for Boggs Lake hedge-hyssop.
Legenere	<i>Legenere limosa</i>	Fed: CA: CNPS:	-- -- 1B. 1	Presumed Absent; The Magpie Creek drainage channel within the project area is likely too regularly maintained for species occurrence. Nearest CNDDDB occurrence is approximately 4 miles from project location; species presumed absent.
Woolly rosemallow	<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	Fed: CA: CNPS:	-- -- 1B. 2	Presumed Absent; The Magpie Creek drainage channel is likely too regularly maintained for species occurrence. Nearest CNDDDB occurrence is approximately 5 miles from project location.
Ahart's dwarf rush	<i>Juncus leiospermus</i> var. <i>ahartii</i>	Fed: CA: CNPS:	-- -- 1B. 2	Presumed Absent; The project area lacks the requisite vernal pools and mesic grassland community; habitat unsuitable for Ahart's dwarf rush.
Slender Orcutt grass	<i>Orcuttia tenuis</i>	Fed: CA: CNPS:	T E 1B. 1	Presumed Absent; project area lacks the requisite vernal pools and site elevation is well outside the species range; habitat unsuitable for slender Orcutt grass.
Sacramento Orcutt grass	<i>Orcuttia viscida</i>	Fed: CA: CNPS:	E E 1B. 1	Presumed Absent; The project area lacks the requisite vernal pools and site elevation is outside the species range; habitat unsuitable for Sacramento Orcutt grass.
Bearded popcorn-flower	<i>Plagiobothrys hystriculus</i>	Fed: CA: CNPS:	-- -- 1B. 1	Presumed Absent; The project area lacks the species' requisite vernal pools and mesic grassland community; habitat unsuitable for bearded popcorn-flower.
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	Fed: CA: CNPS:	-- -- 1B. 2	Presumed Absent; The project area contains Magpie Creek drainage channels potentially suitable for the species. Nearest CNDDDB occurrence is approximately 3.5 miles from project location and believed possibly extirpated; species presumed absent.

Common Name	Scientific Name	Status	General Habitat Description	Potential for Occurrence and Rationale
Suisun Marsh aster	<i>Symphotrichum lentum</i>	Fed: CA: CNPS:	-- -- 1B. 2	A perennial rhizomatous herb inhabiting wetlands, freshwater marsh, and brackish-marsh communities. Flowers May-November (0-984 feet). Presumed Absent; Magpie Creek drainage channel is likely too regularly maintained for species occurrence. Nearest CNDDB occurrence is over 10 miles from project location; species presumed absent.
Avian Species				
Tricolored blackbird	<i>Agelaius tricolor</i>	Fed: CA: DFG:	-- -- SS C	Prefers freshwater marsh, swamp and wetland communities, but utilize agricultural or upland habitats that can support large colonies often in the Central Valley area. Requires protected dense nesting habitat protected from predators, be within 3-5 miles to a suitable foraging area with insect prey and within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and in some irrigated croplands (silage, alfalfa, etc.). Nests mid-march - early August, but may extend until October/November in the Sacramento Valley region. Presumed Absent; The project area does not contain the dense emergent wetland or an adequate source of open water needed throughout the breeding season. Much of the surrounding area is urbanized or industrial with potentially unsuitable foraging habitat; habitat unsuitable for species. Nearest CNDDB occurrence is approximately 6 miles from project location.
Golden eagle	<i>Aquila chrysaetos</i>	Fed: CA: DFG:	-- -- FP	Inhabits grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats. Requires open terrain for hunting, often utilizing rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops. Home range dependent on prey availability and habitat openness; estimated at 48 mi ² in northern California. Species nests on cliffs and large trees in open areas; breeds January-August (0-11,000 feet). Presumed absent; The project area contains open grassland habitat which historically may have been suitable for the species. However, the grassland habitat available within the project area is no longer viable to support the species and is in close proximity to industrial land use; habitat unsuitable for golden eagle.
Burrowing owl	<i>Athene cunicularia</i>	Fed: CA: DFG:	-- -- SS C	Species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed open habitats. Requires friable soils for burrow construction (Below 5,300 feet). Presumed Absent; Project site is disturbed, developed and too frequently managed for species occurrence; habitat unsuitable for burrowing owl. Nearest CNDDB occurrence is 4 miles from the project.

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Common Name	Scientific Name	Status	General Habitat Description	Potential for Occurrence and Rationale	
Swainson's hawk	<i>Buteo swainsoni</i>	Fed: CA: DFG:	-- T --	Inhabits grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, alfalfa or grain fields that support a stable rodent prey base. Breeds March to late August.	Low to Moderate; project area contains open grassland habitat contiguous with a larger tract of grassland outside the study area potentially suitable for the species foraging. Nearest CNDDDB occurrence is 2 mile from project location.
White-tailed kite	<i>Elanus leucurus</i>	Fed: CA: DFG:	-- -- FP	Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Prefers open grasslands, meadows or marshes for foraging close to isolated, dense-topped trees for nesting and perching. Breeds Feb- Oct.	Low to Moderate; The project area north west of Vinci Avenue bridge contains an open grassy field potentially suitable for the species foraging. Nearest CNDDDB occurrence is approximately 1 mile from project location.
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	Fed: CA: DFG:	C E --	Species inhabits riparian forests, along broad, lower flood bottoms of larger river systems. Nests in large blocks of riparian jungles often mixed with cottonwoods. Nesting appears to be preferred in riparian forest habitats with a dense understory; requires water near nesting site. Breeds June-August.	Presumed absent; project area lacks the requisite riparian forest habitat in proximity to a large river system; habitat unsuitable for western yellow-billed cuckoo.
Purple martin	<i>Progne subis</i>	Fed: CA: DFG:	-- -- SS C	Present in California as a summer migrant, arriving in March and departing by late September. Inhabits valley foothill and montane hardwood/hardwood-conifer, coniferous habitats and riparian habitats. Nests in tall, old, isolated trees or snags in open forest or woodland and in proximity to a body of water. Frequently nests within former woodpecker cavities; may nest in human-made structures such as nesting boxes, under bridges and in culverts. Breeds April-August.	Presumed absent; project area lacks the requisite riparian forest or hardwood/hardwood conifer forest habitats; habitat unsuitable for purple martin.

Common Name	Scientific Name	Status	General Habitat Description	Potential for Occurrence and Rationale	
Bank swallow	<i>Riparia riparia</i>	Fed: CA: DFG:	-- T --	A migratory colonial nester inhabiting lowland and riparian habitats west of the desert during spring - fall. Majority of current breeding populations occur along the Sacramento and Feather rivers in the north Central Valley. Requires vertical banks or cliffs with fine textured/sandy soils for nesting (tunnel and burrow excavations). Nests exclusively near streams, rivers, lakes or the ocean. Breeds May-July.	Low to Moderate; During a March 2015 field visit, a bank swallow was observed under Vinci Avenue bridge, within the project area. While there is an occurrence of bank swallow within the project area, there will be no impacts to the bridge or swallow habitat during construction. With implementation of minimization and avoidance measures BIO-1 & BIO-2, the project will not impact the viability of the overall population.
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Fed: CA: DFG:	E E --	Summer resident of southern California inhabiting low riparian habitats in the vicinity of water and dry river bottoms. Prefers willows, baccharis, mesquite and other low, dense vegetation as nesting sites (below 2000 feet).	Presumed absent; project area lacks suitable riparian forest habitat for species occurrence; habitat unsuitable for Least Bell's vireo.
Mammal Species					
American badger	<i>Taxidea taxus</i>	Fed: CA: DFG:	-- -- SS C	Prefers treeless, dry, open stages of most shrub and herbaceous habitats with friable soils and a supply of rodent prey. Species also inhabits forest glades and meadows, marshes, brushy areas, hot deserts, and mountain meadows. Species maintains burrows within home ranges estimated between 338-1,700 acres, dependent on seasonal activity. Burrows are frequently re-used, but new burrows may be created nightly. Young are born in March and April within burrows dug in relatively dry, often sandy, soil, usually in areas with sparse overstory cover. Species is somewhat tolerant of human activity, but is sensitive to automobile mortality, trapping, and persistent poisons (up to 12,000 feet).	Presumed Absent; Open grassland habitat adjacent to the project area contains components potentially suitable for the species, however the habitat is too small to support the American badger.

VINCI AVENUE BRIDGE IMPROVEMENTS PROJECT (T15125500)
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Common Name	Scientific Name	Status	General Habitat Description	Potential for Occurrence and Rationale
Reptile Species				
Western pond turtle	<i>Emys marmorata</i>	Fed: CA: DFG:	-- -- SS C	Low to Moderate; The project area west of Magpie Creek diversion contains an open grassy field potentially suitable for reproduction and potential basking sites are located within the stream. Nearest CNDDDB occurrence is approximately 0.80 mile from project location; no occurrences are documented within the Magpie Creek drainage.
Giant garter snake	<i>Thamnophis gigas</i>	Fed: CA: DFG:	T T --	Presumed Absent; Magpie Creek diversion does not contain adequate water during the species active season; habitat unsuitable for giant garter snake. The nearest CNDDDB occurrence is 6 miles from the project location; no occurrences are documented within the Magpie Creek drainage.
Amphibian Species				
California tiger salamander	<i>Ambystoma californiense</i>	Fed: CA: DFG:	T T SS C	Presumed Absent; The site occurs within a disturbed urban area adjacent to residences, businesses and contains frequently disked fields and lacks the preferred grassy understory of valley-foothill hardwood habitats; habitat unsuitable for California tiger salamander. CNDDDB records show the nearest species occurrence is over 15 miles from the project study area.

VINCI AVENUE BRIDGE IMPROVEMENTS PROJECT (T15125500)
INITIAL STUDY

Common Name	Scientific Name	Status	General Habitat Description	Potential for Occurrence and Rationale	
California red-legged frog	<i>Rana draytonii</i>	Fed: CA: DFG:	T -- SS C	Inhabits lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development and must have access to estivation habitat. Occurs from elevations near sea level to 5,200 ft.	Presumed Absent; Magpie Creek in proximity to the project area does not contain adequate deep water or estivation habitat for the species. CNDDDB records show the nearest species occurrence is over 15 miles from the project study area.
Western spadefoot	<i>Spea hammondi</i>	Fed: CA: DFG:	-- -- SS C	Inhabits burrows within grassland and valley foothill hardwood woodland communities. Requires vernal, shallow, temporary pools formed by heavy winter rains for reproduction. Breeds late winter-March.	Presumed Absent; Magpie Creek in proximity to the project area does not contain preferred valley foothill hardwood woodland communities and adjacent fields are frequently disked; habitat unsuitable for western spadefoot. Nearest CNDDDB occurrence is over 10 miles from project location.
Invertebrate Species					
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	Fed: CA: DFG:	E -- --	Inhabits relatively large and turbid clay bottomed playa vernal pools. Species requires pools to continuously hold water for a minimum of 19 days and must remain inundated into the summer months. Occupied playa pools typically are 1 to 88 acres in size, but species may utilize smaller, less turbid pools.	Presumed Absent; project area lacks requisite vernal pool habitat and clay soils; habitat unsuitable for conservancy fairy shrimp.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	Fed: CA: DFG:	T -- --	Endemic to the grasslands of the Central Valley, Central Coast mountains and South Coast Mountains, in astatic rain-filled pools. Inhabits small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools. Species is dependent on seasonal fluctuations.	Presumed Absent; The project area lacks requisite vernal sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools required for vernal pool fairy shrimp; habitat unsuitable.
Vernal pool tadpole shrimp	<i>Lepidurus packardi</i>	Fed: CA: DFG:	E -- --	Inhabits vernal pools and swales containing clear to highly turbid waters such as pools located in grass bottomed swales of unplowed grasslands, old alluvial soils underlain by hardpan, and mud-bottomed pools with highly turbid water.	Presumed Absent; The project area lacks requisite vernal pools and grassed swales required for vernal pool tadpole shrimp; habitat unsuitable.

VINCI AVENUE BRIDGE IMPROVEMENTS PROJECT (T15125500)
INITIAL STUDY

Common Name	Scientific Name	Status	General Habitat Description	Potential for Occurrence and Rationale	
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	Fed: CA: DFG:	T -- --	Requires elderberry shrubs (<i>Sambucus</i> sp.) as host plants. Typically in moist valley oak woodlands associated with riparian corridors in the lower Sacramento River and upper San Joaquin River drainages. Prefers elderberries 2-8 inches in diameter; some preference toward 'stressed' elderberries.	Presumed Absent; The project area lacks the requisite elderberry shrub habitat for valley elderberry longhorn beetle; habitat unsuitable.
Fish Species					
Central Valley steelhead	<i>Oncorhynchus mykiss</i>	Fed: CA: DFG:	T -- --	Spawning occurs in small tributaries on coarse gravel beds in riffle areas. Central Valley steelhead are found in the Sacramento River system; the principal remaining wild populations spawn annually in Deer and Mill Creeks in Tehama County, in the lower Yuba River, a small population in the lower Stanislaus River and, though potentially extirpated, from the San Joaquin basin.	Presumed Absent; Magpie Creek diversion within and in proximity to the project area does not provide adequate water, substrates, or connectivity to known river populations; habitat unsuitable for Central Valley steelhead.
Green sturgeon	<i>Acipenser medirostris</i>	Fed: CA: DFG:	T -- SS C	Most marine sturgeon species. Currently believed to only spawn in the Sacramento River, Rogue River, Klamath and Trinity Rivers (Klamath River basin) to spawn. Known to occupy other river bodies including the lower Feather River; spawning not recorded. Large cobbles preferred for spawning, but may utilize a range of substrates from bedrock to sand. Spawning occurs Mar-Jul.	Presumed Absent; Magpie Creek diversion within and in proximity to the project area does not provide adequate water, substrates, or connectivity to known river populations; habitat unsuitable for green sturgeon.
Sacramento perch	<i>Archoplites interruptus</i>	Fed: CA: DFG:	-- -- SS C	Inhabits sloughs, lakes, and slow moving rivers of the Central Valley. Prefers turbid lakes, reservoirs and ponds warmed by summer heat and absent of plants; may occasionally occur in clear water among beds of aquatic vegetation. Species tolerates high temperatures, high salinities, high turbidity, and low water clarity. Young require aquatic and overhanging vegetation for cover. Spawns March-August in water temperatures between 64-84°F.	Presumed Absent; Magpie Creek diversion within and in proximity to the project area does not provide adequate water to support the species; habitat unsuitable for Sacramento perch.

VINCI AVENUE BRIDGE IMPROVEMENTS PROJECT (T15125500)
INITIAL STUDY

Common Name	Scientific Name	Status	General Habitat Description	Potential for Occurrence and Rationale	
Delta smelt	<i>Hypomesus transpacificus</i>	Fed: CA: DFG:	T E --	Occurs within the Sacramento-San Joaquin Delta and seasonally within the Suisun Bay, Carquinez Strait and San Pablo Bay. Most often occurs in partially saline waters.	Presumed Absent; Magpie Creek diversion within and in proximity to the project area is outside the range of the species; habitat unsuitable for delta smelt.
Central Valley spring-run Chinook salmon	<i>Oncorhynchus tshawytscha</i>	Fed: CA: DFG:	T T --	Spring-run Chinook enter the Sacramento-San Joaquin River system to spawn, requiring larger gravel particle size and more water flow through their redds than other salmonids. Remaining runs occur in Butte, Mill, Deer, Antelope, and Beegum Creeks, tributaries to the Sacramento River. Known to occur in Siskiyou and Trinity counties.	Presumed Absent; Magpie Creek diversion within and in proximity to the project area does not provide adequate water, substrates, or connectivity to known river populations; habitat unsuitable for Central Valley spring-run Chinook salmon.
Winter-run chinook salmon, Sacramento River	<i>Oncorhynchus tshawytscha</i>	Fed: CA: DFG:	E E --	Winter-run Chinook are currently restricted within the Sacramento River below Keswick dam; species does not spawn in tributaries. Species requires cold water over gravel beds to spawn.	Presumed Absent; Magpie Creek diversion within and in proximity to the project area does not provide adequate water, substrates, or connectivity to known river populations; habitat unsuitable for Central Valley winter-run Chinook salmon, Sacramento River.
Sacramento splittail	<i>Pogonichthys macrolepidotus</i>	Fed: CA: DFG:	-- -- SS C	Historically inhabited low moving rivers, sloughs, and alkaline lakes of the Central Valley; now restricted to the Delta, Suisun Bay and associated marshes. Species is adapted to fluctuating environments with tolerance to water salinities from 10-18 ppt., low oxygen levels (< 1.0 mg/L) and temperatures of 41-75°F. Spawns late February- early July, with a peak in March-April; requires flooded vegetation for spawning activity and protective cover for young.	Presumed Absent; Magpie Creek diversion within and in proximity to the project area does not provide adequate water, and is outside the current known range of the species; habitat unsuitable for Sacramento splittail.

<p>Federal Designations (Fed): (FESA, USFWS) C: Federal candidate D: Federally delisted E: Federally listed, endangered T: Federally listed, threatened</p>	<p>State Designations (CA): (CESA, CDFG) E: State-listed, endangered T: State-listed, threatened FP: CDFG Fully Protected</p>
<p>Other Designations DFG_SSC: DFG Species of Special Concern DFG_FP: DFG Fully Protected</p> <p>California Native Plant Society Designations: <i>*Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the CFG Code. This interpretation is inconsistent with other definitions.</i></p> <p>1A: Plants presumed extinct in California. 1B: Plants rare and endangered in California and throughout their range. 2: Plants rare, threatened, or endangered in California but more common elsewhere in their range. 3: Plants about which need more information; a review list. 4: Plants of limited distribution; a watch list.</p> <p>Plants 1B, 2, and 4 extension meanings: _1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) _2 Fairly endangered in California (20-80% occurrences threatened) _3 Not very endangered in California (<20% of occurrences threatened or no current threats known)</p>	
<p>Potential for Occurrence Criteria: Present: Species was observed on site during a site visit or focused survey. High: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site. Low-Moderate: Either low quality habitat (including soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site; or suitable habitat strongly associated with the species occurs on site, but no records were found within the database search. Presumed Absent: Focused surveys were conducted and the species was not found, or species was found within the database search but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.</p>	
<p>Source: (CNDDDB 2015), (CNPS 2015), (Miller and Hornaday 1999), (Shuford and Gardali 2008), (Kyle, Keiller 2011) (Zeiner 1988-1990), (University of California 2012), (University of California Davis 2012), (USFWS 2015)</p>	

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the Master EIR and are considered mitigation measures for the following project-level and cumulative impacts.

Impact 6.3-2: Implementation of the 2035 General Plan could adversely affect special-status plant species due to the substantial degradation of the quality of the environment or reduction of population or habitat below self-sustaining levels.

and

Impact 6.3-3: Implementation of the 2035 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status invertebrates.

and

Impact 6.3-4: Implementation of the 2035 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels with special-status birds, through the loss of both nesting and foraging habitat.

and

Impact 6.3-5: Implementation of the 2035 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status amphibians and reptiles.

and

Impact 6.3-6: Implementation of the 2035 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status mammals.

and

Impact 6.3-10: Implementation of the 2035 General Plan could result in the loss of California Department of Fish and Game (CDFG)-defined sensitive natural communities such as elderberry savanna, northern claypan vernal pools, and northern hardpan vernal pools.

and

Impact 6.3-13: Implementation of the City's 2035 General Plan and regional buildout assumed in the Sacramento Valley could result in a regional loss of special-status plant or wildlife species or their habitat.

Mitigation Measure 6.3-2 - General Plan Policy ER 2.1.10 - Habitat Assessments: The City shall consider the potential impact on sensitive plants and for each project requiring discretionary approval and shall require preconstruction surveys and/or habitat assessments for sensitive plant and wildlife species. If the preconstruction survey and/or habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either

(1) protocol-level or industry recognized (if no protocol has been established) surveys shall be conducted; or (2) presence of the species shall be assumed to occur in suitable habitat on the project site. Survey Reports shall be prepared and submitted to the City and the CDFG or USFWS (depending on the species) for further consultation and development of avoidance and/or mitigation measures consistent with state and federal law.

Impact 6.3-8: Implementation of the 2035 General Plan could result in the loss or modification of riparian habitat, resulting in a substantial adverse effect.

Mitigation Measure 6.3-8 – General Plan Policy ER 2.1.5 - Riparian Habitat Integrity: The City shall preserve the ecological integrity of creek corridors, canals, and drainage ditches that support riparian resources by preserving native plants and, to the extent feasible, removing invasive, non-native plants. If not feasible, adverse impacts on riparian habitat shall be mitigated by the preservation and/or restoration of this habitat at a 1:1 ratio, in perpetuity.

Impact 6.3-9: Implementation of the 2035 General Plan could result in a substantial adverse effect on state or federally protected wetlands and/or waters of the United States through direct removal, filling, or hydrological interruption.

Mitigation Measure 6.3-9 – General Plan Policy ER 2.1.6 – Wetland Protection: The City shall preserve and protect wetland resources including creeks, rivers, ponds, marshes, vernal pools, and other seasonal wetland, to the extent feasible. If not feasible, the mitigation of all adverse impacts on wetland resources shall be required in compliance with State and Federal regulations protecting wetland resources, and if applicable, threatened or endangered species. Additionally, the City may require either on- or off-site permanent preservation of an equivalent amount of wetland habitat to ensure no-net-loss of value and/or function.

Impact 6.3-14: Implementation of the 2035 General Plan and regional buildout assumed in the Sacramento Valley could contribute to the cumulative loss of sensitive natural communities including wetlands and riparian habitat in the region.

Implement Mitigation Measures 6.3-8 and 6.3-9.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact would be significant if any of the following conditions or potential thereof, would result with implementation of the proposed project:

- Creation of a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal; or
- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands).

For the purposes of this document, “special-status” has been defined to include those species, which are:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, 4700, or 5050);
- Designated as species of concern by U.S. Fish and Wildlife Service (USFWS), or as species of special concern to California Department of Fish and Game (CDFG);
- Plants or animals that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA).

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.3 of the Master EIR evaluated the effects of the 2035 General Plan on biological resources within the general plan policy area. The Master EIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status birds, through the loss of both nesting and foraging habitat.

Policies in the 2035 General Plan were identified as mitigating the effects of development that could occur under the provisions of the 2035 General Plan. Policy 2.1.5 calls for the City to preserve the ecological integrity of creek corridors and other riparian resources; Policy ER 2.1.10 requires the City to consider the potential impact on sensitive plants for each project and to require pre-construction surveys when appropriate; and Policy 2.1.11 requires the City to coordinate its actions with those of the California Department Fish and Game, U.S. Fish and Wildlife Service, and other agencies in the protection of resources.

The Master EIR concluded that the cumulative effects of development that could occur under the 2035 General Plan would be significant and unavoidable as they related to effects on special-status plant species (Impact 6.3-2), reduction of habitat for special-status invertebrates (Impact 6.3-3), loss of habitat for special-status birds (Impact 6.3-4), loss of habitat for special-status amphibians and reptiles (Impact 6.3-5), loss of habitat for special-status mammals (Impact 6.5-6), special-status fish (Impact 6.3-7) and, in general, loss of riparian habitat, wetlands and sensitive natural communities such as elderberry savannah (Impacts 6.3-8 through 10).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

The following General Plan policies would avoid or lessen environmental impacts as identified in the Master EIR and are considered mitigation measures for the following project-level and cumulative impacts.

Impact 6.3-8: Implementation of the 2035 General Plan could result in the loss or modification of riparian habitat, resulting in a substantial adverse effect.

Mitigation Measure 6.3-8 – General Plan Policy ER 2.1.5 - Riparian Habitat Integrity: The City shall preserve the ecological integrity of creek corridors, canals, and drainage ditches that support riparian resources by preserving native plants and, to the extent feasible, removing

invasive, non-native plants. If not feasible, adverse impacts on riparian habitat shall be mitigated by the preservation and/or restoration of this habitat at a 1:1 ratio, in perpetuity.

Impact 6.3-9: Implementation of the 2035 General Plan could result in a substantial adverse effect on state or federally protected wetlands and/or waters of the United States through direct removal, filling, or hydrological interruption.

Mitigation Measure 6.3-9 – General Plan Policy ER 2.1.6 – Wetland Protection: The City shall preserve and protect wetland resources including creeks, rivers, ponds, marshes, vernal pools, and other seasonal wetland, to the extent feasible. If not feasible, the mitigation of all adverse impacts on wetland resources shall be required in compliance with State and Federal regulations protecting wetland resources, and if applicable, threatened or endangered species. Additionally, the City may require either on- or off-site permanent preservation of an equivalent amount of wetland habitat to ensure no-net-loss of value and/or function.

General Plan Policy ER-2.1.9: The City shall preserve, protect, and avoid impacts to wildlife corridors. If corridors are adversely affected, damaged habitat shall be replaced with habitat of equivalent value.

General Plan Policy ER-1.1.7: The City shall minimize disturbances of natural water bodies and natural drainage systems, protect areas of disturbance from erosion and sediment loss, and comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinance.

General Plan Policy ER-3.1.3: The City shall protect in place all heritage trees, defined under Sacramento City Code Title 12, Chapter 12.64 Heritage Trees as follows:

1. Any tree of any species with a trunk diameter at breast height (dbh) of thirty-two (32) inches or more, which is of good quality in terms of health, vigor of growth and conformity to generally accepted horticultural standards of shape and location for its species.
 2. Any native Oak (*Quercus* sp.), California buckeye (*Aesculus californica*) or California sycamore (*Platanus racemosa*), having a dbh of eleven and a half (11.5) inches or greater when a single trunk, or a cumulative dbh of 11.5 inches or greater when a multi-trunk, which is of good quality in terms of health, vigor of growth and conformity to generally accepted horticultural standards of shape and location for its species.
 3. Any tree with an eleven and a half (11.5) inches dbh or greater in a riparian zone. The riparian zone is measured from the centerline of the water course to thirty (30) feet beyond the high water line.
 4. Any tree, grove of trees or woodland trees designated by resolution of the city council to be of special historical or environmental value or of significant community benefit.
- Where tree removal cannot be avoided, the project shall replace removed trees or provide suitable mitigation.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A AND C

The Vinci Avenue Bridge Improvements Project would have no additional significant environmental effect to the surrounding environment, creating a hazard to plant or animal populations. Based upon the biologist's database search, and as described in Table 4, all special-status species, except white-tailed kite, Swainson's hawk, western pond turtle, giant garter snake and bank swallow were presumed absent due to lack of suitable habitat. In order to

ensure that no additional significant environmental effects are caused due to the project BMPs would be put in place to protect the project area. To protect nocturnal riparian species during construction, no night work shall be permitted within 100 feet of the Magpie Creek Diversion Channel corridor. To minimize permanent lighting within the creek corridor, all bridge and trail lighting proposed to be established within 50 feet of Magpie Creek Diversion Channel shall be shielded and directed away from the creek. Should any sensitive plant species be found within the project area, specimens shall be ESA fenced or relocated as determined by the appropriate regulatory agency. All landscaping installed as part of the project shall consist of a biologist approved plant palette from native, locally adapted species. Prior to arrival at the project site and prior to leaving the project site, construction equipment that may contain invasive plants and/or seeds shall be cleaned to reduce the spreading of noxious weeds.

Species of Special Concern:

White-tailed kite (*Elanus leucurus*) is a CDFW Species of Special Concern. During the March pedestrian survey, no sign of the white-tailed kite was observed. While approximately 6 acres of ruderal vegetation dominated by non-native grassland are potentially suitable for species foraging, surveys also revealed a high level of human activity within the project area including residential homes, industrial activity, and a moderate to high volume of vehicular travel on Vinci Avenue. The project area also has few suitable trees for breeding activities. This high level of human activity combined with the lack of nesting habitat greatly reduces the likelihood of nesting activities within the project area. In addition trees present within the project area lack the density preferred for breeding activities. The nearest CNDDDB occurrence is approximately 1 mile from project site.

Although no white-tailed kites were observed during March 2015 survey, the species could occur within the project vicinity. Most impacts to potential foraging habitat would be temporary (less than 0.01 acre), with minimal permanent impacts (less than 0.01 acre); nesting is not anticipated to occur within project area. Considering the amount of development and hardscape in the project area, the current frequency and volume of human activity, the amount of affected foraging habitat within the project limits, anticipated absence of species nesting, and implementation of mitigation measures BIO-1 & BIO-2 the project would not impact the viability of the overall population.

The Swainson's hawk is a State threatened species. During the March biological survey, no sign of the Swainson's hawk was observed. Although the project area is not located within or near a preferred riparian system, trees potentially suitable for nesting (10 feet or taller and containing a dbh of 2 inches or greater) are scattered throughout and approximately 6 acres of ruderal vegetation dominated by non-native grassland are potentially suitable for species foraging. Surveys also revealed a high level of human activity within the project area including residential homes, industrial activity, and a moderate to high volume of vehicular travel on Vinci Avenue which greatly reduces the suitability of observed trees for nesting activities within the project area. The nearest CNDDDB occurrence is approximately 2 miles from project site.

Although no Swainson's hawk were observed during the March survey, the species could occur within the project vicinity. Most impacts to potential foraging habitat will be temporary (less than 0.01 acre), with minimal permanent impacts (less than 0.01 acre); nesting is not anticipated to occur within the project area. Considering the amount of development and hardscape in the project area, the current frequency and volume of human activity, the amount of affected foraging habitat within the project limits, anticipated absence of species nesting, and

implementation of minimization and avoidance measures BIO-1 & BIO-2, the project will not impact the viability of the overall population.

Western pond turtle (*Emys marmorata*) is a CDFW Species of Special Concern. During the March pedestrian survey, no sign of the western pond turtle was observed. While approximately 6 acres of ruderal vegetation dominated by non-native grassland are potentially suitable for reproduction, and less than 0.01 acre of suitable aquatic habitat is within the project area, surveys also revealed a high level of human activity within the project area including residential homes, industrial activity, and a moderate to high volume of vehicular travel on Vinci Avenue. The project area also has few suitable basking sites for western pond turtle. This high level of human activity combined with the lack of suitable habitat greatly reduces the likelihood of western pond turtle occurrences within the project area.

Although no western pond turtles were observed during March 2015 survey, the species could occur within the project vicinity. Most impacts to potential habitat would be temporary (less than 0.01 acre), with minimal permanent impacts (less than 0.01 acre). Considering the amount of development and hardscape in the project area, the current frequency and volume of human activity, the amount of suitable habitat within the project limits, and implementation of mitigation measure BIO-5 & BIO-6, the project would not impact the viability of the overall population.

Giant garter snake (*Thamnophis gigas*) is a Federal and State Threatened species. While primary constituent elements of giant garter snake habitat were observed within proximity to the project area, there is an overall low likelihood of species presence within the project area based on negative survey results from 2005 and 2006 for areas upstream and downstream of the project. There will be no impacts to the stream during construction and impacts to upland habitat will be minimal (less than 0.01 acre). Considering the amount of development and hardscape in the project area, the current frequency and volume of human activity, the amount of suitable habitat within the project limits, and implementation of mitigation measure BIO-5 & BIO-6, the project would not impact the viability of the overall population.

Bank swallow (*Riparia riparia*) is a State threatened species. During a March 2015 field visit, a bank swallow was observed under Vinci Avenue bridge, within the project area. While there is an occurrence of bank swallow within the project area, there will be no impacts to the bridge or swallow habitat during construction. With implementation of minimization and avoidance measures BIO-1 & BIO-2, the project will not impact the viability of the overall population.

Potential Waters of the U.S. and State

Permanent Impacts

The project would result in permanent impacts (0.060 acre of non-wetlands). Existing roadside ditches will be impacted by shoulder widening, however new swales will be provided with inlets to convey drainage to the existing storm drain system along Vinci Avenue. Table 5 is a compilation of anticipated impacts to waters of the U.S. and State within the project area. The project would result in no permanent impacts to Waters of the U.S. or State (Appendix D).

Temporary Impacts

The project would result in no temporary impacts to Waters of the U.S. or State.

Table 5: Anticipated Impacts to Waters Within the Project Area

Feature	Waters of the U.S. and State		Non-Jurisdictional Ditches	
	Temporary	Permanent	Temporary	Permanent
Swale	0	0	0	0
Emergent Wetland	0	0	0	0
Intermittent Stream	0	0	0	0
Drainage Ditch	0	0	0	0.060
Total	0	0	0	Less than 0.01

Non-Jurisdictional Ditches

The project would result in permanent impacts to non-jurisdictional ditches to the north of Vinci Avenue and to the west of the bridge in the proposed road extension area. No other impacts are anticipated.



Sensitive Habitats

Great Valley Willow Scrub:

The Great Valley Willow Scrub community occurs within the project area however no impacts are anticipated to accommodate the roadway and bridge improvements. The proposed project has been designed to minimize all permanent impacts to the maximum extent practicable.

To further reduce project-specific impacts, implementation of Mitigation Measure BIO-4 would ensure that construction activities would avoid impacts on species of special concern as well as

regulatory waters and that the project would compensate for loss of waters within the impact area.

QUESTION B

The Vinci Avenue Improvements Project would not result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animals. There is low to moderate potential for the Swainson's hawk, a State threatened species, white-tailed kite, a CDFW Species of Special Concern, western pond turtle, a State listed species of special concern, giant garter snake, a Federal and State threatened species, and bank swallow, a State threatened species, to occur within the project area. Considering the amount of development and hardscape in the project area, the current frequency and volume of human activity, the amount of affected foraging habitat within the project limits, anticipated absence of species nesting, and the implementation of minimization and avoidance measures incorporated into the project design, the project would not impact the viability of the overall population and further consultation under CESA is not anticipated. To minimize and avoid potential impacts to Swainson's hawk, white-tailed kite, western pond turtle, giant garter snake and bank swallow, the project would comply with mitigation measures BIO-1, BIO-2 and BIO-3 to ensure protection of migratory nesting birds.

MITIGATION MEASURES

BIO-1: If construction is planned to occur during the raptor nesting season (February 15th – September 15th) a preconstruction raptor nesting survey shall be conducted by a qualified biologist within 7 days prior to vegetation removal. Vegetation surveyed shall include all trees, 10 feet or taller and containing a dbh of 2 inches or greater. Within 2 weeks of the nesting raptor survey, all vegetation cleared by the biologist shall be removed by the contractor.

A minimum 500 foot no-disturbance buffer shall be established around any active raptor nest to limit the impacts of construction activities. The contractor shall immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged.

BIO-2: If ground disturbance or vegetation removal is to take place during the breeding season (February 15th – September 15th), a pre-construction nesting bird survey shall be conducted within 7 days prior to vegetation removal. Vegetation surveyed shall include all trees, bushes, tall grasses and emergent vegetation. Within 2 weeks of the nesting bird survey, all vegetation cleared by the biologist shall be removed by the contractor.

A minimum 100 foot no-disturbance buffer shall be established around any active nest to limit the impacts of construction activities. The contractor shall immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged.

BIO-3: If construction on the existing bridge is planned to occur during the swallow nesting season, measures shall be taken to avoid impacts to migratory swallows. To protect migratory swallows, unoccupied nests will be removed from the existing bridge structure prior to the nesting season (February 15th – September 15th). During the nesting season, the bridge structure shall be maintained through the active removal of partially constructed nests. Swallows can complete nest construction in approximately 3 days. After a nest is completed, it can no longer be removed until an approved biologist has determined that all birds have fledged and the nest is no longer being used.

BIO-4: The Magpie Creek Diversion Channel and all associated wetland vegetation shall be marked as Environmentally Sensitive Area (ESA) and either staked or fenced with orange snow fencing to ensure the construction areas will not encroach further than the work limits designated in the environmental permits (to be obtained prior to construction). During the construction period, a qualified biologist shall inspect the construction limits periodically to ensure sensitive locations remain undisturbed.

FINDINGS

All additional significant environmental effects of the project relating to Biological Resources can be mitigated to a less-than-significant level.

	Effect will	Effect can be	No additional
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Issues:	be studied in the EIR	mitigated to less than significant	significant environmental effect
3. CULTURAL RESOURCES Would the project:			
A) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?			X
B) Directly or indirectly destroy a unique paleontological resource?		X	

ENVIRONMENTAL SETTING

An Area of Potential Effects (APE) was established considering areas of permanent and temporary disturbance, including construction staging, utility relocations, and grading. The APE has been greatly disturbed and modified by industrial and commercial development, the construction and maintenance of roadways, vegetation maintenance, agricultural and field planting maintenance and buried utilities. The Vinci Avenue Bridge (Bridge #24C0224) is a two-lane, two-span, reinforced concrete slab-bridge located approximately 0.35 miles east of the intersection of Vinci Avenue and Dry Creek Road. Constructed in 1970, the bridge carries Vinci Avenue over Magpie Creek Diversion Channel. The Vinci Avenue bridge is not eligible for listing on the National Register of Historic Places.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, cultural resource impacts may be considered significant if the proposed project would result in one or more of the following:

1. Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5 or
2. Directly or indirectly destroy a unique paleontological resource. Answers to Checklist Questions

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential effects of development under the 2035 General Plan on prehistoric and historic resources. See Chapter 6.4. The Master EIR identified significant and unavoidable effects on historic resources and archaeological resources.

General plan policies identified as reducing such effects call for identification of resources on project sites (Policy HCR 2.1.1), implementation of applicable laws and regulations (Policy HCR 2.1.2 and HCR 2.1.15), early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10 and encouragement of adaptive reuse of historic resources (Policy HCR 2.1.13). Demolition of historic resources is deemed a last resort. (Policy HCR 1.1.14)

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

A Cultural Resources Survey and Inventory Report was prepared in February 2015 by ICF International to evaluate the potential impacts this project could have on cultural resources (Appendix E). As part of the report, an archaeological sensitivity analysis was conducted for the Area of Potential Effect (APE) to evaluate the potential for archaeological resources in the project area. This analysis determined that the potential for both intact and subsurface archaeological deposits is low. This determination results from the fact that the entire APE has experienced a large degree of previous ground disturbance from historic period and modern development activities, and no archaeological deposits were identified during the archaeological field survey conducted for the present study.

In April 2014, and in February 2015, an ICF archaeologist and architectural historian conducted a cultural resources pedestrian survey for identifying archaeological and architectural resources. During the survey, one cultural resource 45 years or older was identified within the original APE. An ICF architectural historian then evaluated the resource under NRHP and CRHR Criteria, recommending it as not eligible for either the NRHP or CRHR therefore a finding of No Historic Properties Affected for the project is anticipated.

Based on this report, no archaeological resources are expected to be encountered during project construction. Mitigation measure CR-1 would further minimize the potential for impacts to archaeological resources should they be encountered during construction activities.

Disturbance to human remains, including those interred outside of formal cemeteries is not anticipated because the project site is already highly disturbed from existing roadways and development. Measure CR-2 would further minimize the potential for impacts as a result of discovery of human remains during construction.

QUESTION B

The proposed project is not anticipated to impact paleontological resources. The project area has been disturbed previously by construction of the surrounding development and industrial uses. As documented in the Master EIR, the general Sacramento area is not considered sensitive for paleontological resources.

MITIGATION MEASURES

CR-1 If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

CR-2 Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave

goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt in that vicinity and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within twenty-four hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.

FINDINGS

All additional significant environmental effects of the project relating to Cultural Resources can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p>4. <u>GEOLOGY AND SOILS</u></p> <p>Would the project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?</p>			X

ENVIRONMENTAL SETTING

Geological formations of the project vicinity include Basin deposits (Qb), Riverbank Formation (Qr) and Modesto-Riverbank Formations (Qmr) (Wagner et.al 1981).

Surface faulting or ground rupture tends to occur along lines of previous faulting. The nearest fault is the Foothill Fault System, located approximately 22 miles north east of the project area. Since previously identified fault lines are not within or near the project area, the possibility of fault rupture is negligible within the site, but in the event of an earthquake on a nearby fault, the project site could experience ground shaking. The California Geological Survey (CGS) probabilistic seismic hazards maps shows that the seismic ground-shaking hazard for the city is relatively low, and is among the lowest in the State.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.5 of the Master EIR evaluated the potential effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, existing mineral resources and paleontological resources in the general plan policy area. Implementation of identified policies in the 2035 General Plan reduced all effects to a less-than-significant level. Policies EC 1.1.1 through 1.1.3 require regular review of the City’s seismic and geologic safety standards, geotechnical investigations for project sites and retrofit of critical facilities such as hospitals and schools.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

The project area is located approximately 36 miles northwest of the nearest active fault and is not within an Alquist-Priolo Earthquake Fault Zone. Therefore, the change of fault rupture within the project area is very low. Since previously identified fault lines are not within or near the project site, the possibility of fault rupture is negligible within the project site, but in the event of an earthquake on a nearby fault, the project site could experience ground shaking.

General Plan Goal EC 1.1 and Policies 1.1.1 to 1.1.3 would ensure that lives and property within the project area protected from seismic hazards. These policies include regular review and enforcement of seismic and geologic safety standards, and geotechnical investigations to determine potential for hazards such as ground rupture, ground shaking, and liquefaction due to seismic events, as well as expansive soils and subsidence problems on sites where these hazards may be present. This impact is within the scope of the General Plan and was analyzed in the Master EIR. By complying with the General Plan policies and City Code, the proposed project would have a less-than-significant impact on exposing life and property to seismic hazards. The project site is relatively level, so there would be no impacts related to the possibility of landslides.

The Regional Water Quality Control Board (RWQCB) permits all regulated construction activities under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity projects with more than 1 acre of ground disturbance. The project's construction activities would be required to comply with the City's Grading, Erosion, and Sediment Control Ordinance. Compliance under this ordinance includes preparation of an erosion and sediment control plan that identifies and implements a variety of best management practices to reduce the potential for erosion or sedimentation.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Geology and Soils.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
5. HAZARDS Would the project: A) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?			X
B) Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?			X
C) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?			X

ENVIRONMENTAL AND REGULATORY SETTING

Federal regulations and regulations adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the AQMD and civil penalties under state and/or federal law, in addition to possible action by U.S. EPA under federal law.

Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145).

SMAQMD Rule 902 and Commercial Structures

The work practices and administrative requirements of Rule 902 apply to all commercial renovations and demolitions where the amount of Regulated Asbestos-Containing Material (RACM) is greater than:

- 260 lineal feet of RACM on pipes, or
- 160 square feet of RACM on other facility components, or
- 35 cubic feet of RACM that could not be measured otherwise.

The administrative requirements of Rule 902 apply to any demolition of commercial structures, regardless of the amount of RACM.

Asbestos Surveys

To determine the amount of RACM in a structure, Rule 902 requires that a survey be conducted prior to demolition or renovation unless:

- the structure is otherwise exempt from the rule, or
- any material that has a propensity to contain asbestos (so-called "suspect material") is treated as if it is RACM.

Surveys must be done by a licensed asbestos consultant and require laboratory analysis. Asbestos consultants are listed in the phone book under "Asbestos Consultants." Large industrial facilities may use non-licensed employees if those employees are trained by the U.S. EPA. Questions regarding the use of non-licensed employees should be directed to the AQMD.

Removal Practices, Removal Plans/Notification and Disposal

If the survey shows that there are asbestos-containing materials present, the SMAQMD recommends leaving it in place.

If it is necessary to disturb the asbestos as part of a renovation, remodel, repair or demolition, Cal OSHA and the Contractors State License Board require a licensed asbestos abatement contractor be used to remove the asbestos-containing material.

There are specific disposal requirements in Rule 902 for friable asbestos-containing material, including disposal at a licensed landfill. If the material is non-friable asbestos, any landfill willing to accept asbestos-containing material may be used to dispose of the material.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if the proposed project would:

- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; or
- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated effects of development on hazardous materials, emergency response and aircraft crash hazards. See Chapter 6.6. Implementation of the General Plan may result in the exposure of people to hazards and hazardous materials during construction activities, and exposure of people to hazards and hazardous materials during the life of the General Plan. Impacts identified related to construction activities and operations were found to be less than significant. Policies included in the 2035 general Plan, including PHS 3.1.1 (investigation of sites

for contamination) and PHS 3.1.2 (preparation of hazardous materials actions plans when appropriate) were effective in reducing the identified impacts.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

Review of the information available through Envirostor and Geotracker (2015) indicated that there are no current or historical clean-up sites or hazardous waste facilities in proximity to the project area. The closest occurrence is approximately 0.65 miles southeast at Oki Nursery Company. There would be a less-than-significant impact to people in regards to exposure of existing contaminated soil and lead during construction activities.

QUESTION B

Review of information available through USGS indicated that nearest ultramafic rock formation which may be associated with naturally occurring asbestos is approximately 18 miles northeast of the project area, along the eastern banks of Folsom Lake (USGS, 2015).

Observations made during the site reconnaissance indicate that Vinci Avenue is constructed with unpainted concrete and/or asphalt, therefore analysis for lead-containing structures prior to construction is not warranted.

QUESTION C

The proposed construction activities associated with the bridge and roadway improvements project will not require dewatering activities and are not likely to encounter groundwater, which is situated at a depth of approximately 57 feet. Therefore, assessment of groundwater conditions beneath the Site prior to design and construction of the bridge replacement is not warranted.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Hazards.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p>6. <u>HYDROLOGY AND WATER QUALITY</u> Would the project:</p> <p>A) Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?</p>			X
<p>B) Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood ?</p>			X

ENVIRONMENTAL SETTING

The project area is within the Lower-American watershed hydrologic unit. The only stream in the project area is the Magpie Creek diversion channel, which flows in a westerly direction to Steelhead Creek, a tributary to the Sacramento River. The primary source of hydrology for Magpie Creek diversion channel and the emergent wetlands within its channel is Magpie Creek. Magpie Creek is not 303(d) listed and it has no associated TMDL restrictions. (SWRCB, 2010)

The Sacramento River and its tributary channels beneficial uses are municipal and domestic supply, agriculture, industry, recreation, freshwater habitats (migration and spawning of fish), and wildlife habitat according to the Basin Plan for the Sacramento River and San Joaquin River Basins (California Regional Water Quality Control Board, 1998).

The proposed project is not located within one of California’s four sole source aquifers. The project is located in Sacramento County which does not have a sole source aquifer.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policy would avoid or lessen environmental impacts as identified in the Master EIR and is considered a mitigation measure for the following project-level and cumulative impacts.

Impact 6.7-3: Implementation of the 2035 General Plan could increase exposure of people and/or property to risk of injury and damage from a localized 100-year flood.

and

Impact 6.7-6: Implementation of the 2035 General Plan, in addition to other projects in the watershed, could result in increased numbers of residents and structures exposed to a localized 100-year flood event.

Mitigation Measure 6.7-6 - General Plan Policy ER 1.1.5 - No Net Increase: The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100- year storm event.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to hydrology and water quality may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the Specific Plan or
- substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.7 of the Master EIR evaluates the potential effects of the 2035 General Plan as they relate to surface water, groundwater, flooding, stormwater and water quality. Potential effects include water quality degradation due to construction activities (Impacts 6.7-1, 6.7-2), and exposure of people to flood risks (Impacts 6.7-3, 6.7-4). Policies included in the 2035 General Plan, including a directive for regional cooperation (Policies ER 1.1.2, EC 2.1.1, EC 2.1.1), comprehensive flood management (Policy EC 2.1.14), and construction of adequate drainage facilities with new development (Policy U 4.1.1) were identified that reduced all impacts to a less-than-significant level.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS QUESTIONS A AND B

The improvements adjacent to Magpie Creek diversion channel would disturb approximately 0.5 acres of soil. Construction activities would not substantially degrade water quality and would not violate any water quality objectives by the State Water Resources Control Board. BMPs will be put in place to prevent sediment and other contaminants generated by construction from impacting the creek.

The proposed project would have an insignificant impact to the existing 100-year floodplain of Magpie Creek diversion channel within the project vicinity. The project is located within the Federal Emergency Management Agency (FEMA) Zone AE, which represents areas with a 1% annual chance of flooding and where the base flood elevation (BFE) is determined. The project area is also within Zone X, which represents areas of 0.2% annual chance flood; areas of 1% annual change 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 (as shown on the Flood Insurance Rate Map in Appendix F).

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Hydrology and Water Quality.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
7. NOISE Would the project:			
A) Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases?			X
B) Result in residential interior noise levels of 45 dBA L _{dn} or greater caused by noise level increases due to the project?			X
C) Result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance?			X
D) Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction?			X
E) Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations?			X
F) Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic?			X

ENVIRONMENTAL SETTING

The noise environment near the proposed project is dominated by traffic sources. Background noise levels are influenced by Vinci Avenue and Dry Creek Road existing surrounding residential, commercial and industrial uses. Traffic remains the dominant noise source at the project site.

The vicinity of the project area is most similar to that of “normal suburban residential urban,” and “normal urban residential.” Normal suburban residential urban areas have a typical noise level of 50-55 dBA while Normal Urban Residential has a typical noise level of 60 dBA (City of Sacramento, 2015).

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the Master EIR and are considered mitigation measures for the following project-level and cumulative impacts.

Impact 6.8-4: Implementation of the 2035 General Plan could permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction.

and

Impact 6.8-9: Implementation of the 2035 General Plan could result in cumulative construction vibration levels that exceed the vibration-peak-particle velocities greater than 0.5 inches per second.

General Plan Policy EC 3.1.5 – Interior Vibration Standards: The City shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.

Impact 6.8-5: Implementation of the 2035 General Plan could permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations.

and

Impact 6.8-10: Implementation of the 2035 General Plan could result in cumulative impacts on adjacent residential and commercial areas being exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations.

General Plan Policy EC 3.1.6 – Vibration Screening Distances: The City shall require new residential and commercial projects located adjacent to major freeways, hard rail lines, or light rail lines to follow the Federal Transit Administration (FTA) screening distance criteria.

Impact 6.8-6: Implementation of the 2035 General Plan could permit historic buildings and archeological sites to be exposed to vibration-peak-particle velocities greater than 0.25 inches per second due to project construction, highway traffic, and rail operations.

General Plan Policy EC 3.1.7 – Vibration: The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archeological sites and require all feasible mitigation measures be implemented to ensure no damage would occur.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts due to noise may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project;

- result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance;
- permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;
- permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential for development under the 2035 General Plan to increase noise levels in the community. New noise sources include vehicular traffic, aircraft, railways, light rail and stationary sources. The general plan policies establish exterior (Policy EC 3.1.1) and interior (EC 3.1.3) noise standards. A variety of policies provide standards for the types of development envisioned in the general plan. See Policy EC 3.1.8, which requires new mixed-use, commercial and industrial development to mitigate the effects of noise from operations on adjoining sensitive land use, and Policy 3.1.9, which calls for the City to limit hours of operations for parks and active recreation areas to minimize disturbance to nearby residences. Notwithstanding application of the general plan policies, noise impacts for exterior noise levels (Impact 6.8-1) and interior noise levels (Impact 6.8-2), and vibration impacts (Impact 6.8-4) were found to be significant and unavoidable.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

Construction will be conducted in accordance with the provisions of Chapter 8.68 of the Sacramento City Code and work will be short term and intermittent.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A, B AND C

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by the City of Sacramento. Construction activity that occurs outside the exempt hours of the day (7am to 6pm from Monday through Saturday, and 9am to 6pm on Sundays) could result in noise that exceeds the 50-dBA daytime standard or 45-dBA nighttime standard. The contractor would be required to comply with the noise ordinance during construction activities. Construction noise is exempt as long as there is compliance with the noise code requirements pursuant to the City Code Section 8.68.080. However, if construction activities generate noise in violation of the timeframes described above, the contractor will be required to obtain the proper variances as outlined in Sections 8.68.250 and 8.68.260. The project would include construction methods, structure designs, and operational methods that would reduce the potential noise and vibration impacts to less than significant levels.

Generally, noise levels at construction sites can vary from 55 dBA to a maximum of nearly 96 dBA when heavy equipment is used. Construction noise of this project would be intermittent,

and noise levels would vary depending on the type of construction activity. For this project, lowest construction equipment-related noise levels would be 55 dBA at a distance of 50 ft for sound from a pick-up truck. Highest noise levels would be up to 90 dBA (at a distance of 50 ft) for a concrete saw for pavement removal. A jackhammer, which would be up to 89 dBA at a distance of 50 ft, would also be utilized during the proposed project.

The project is not anticipated to increase noise levels in the long term. The proposed project is comprised of improvements to an existing bridge and road, and is not a new road. The project would not significantly change the horizontal or vertical alignment of the road. The closest residence to the project site is a commercial building approximately 160 feet southwest of the bridge (see Figure 3). The proposed project would not move the road closer to the building therefore no impacts to existing buildings will occur. A sidewalk will be added to the north side of Vinci Avenue as part of roadway improvements, but this does not qualify as capacity increasing as no new through lane is being added. Therefore, the project is not anticipated to substantially change the amount of traffic through the neighborhood.

The proposed project would have a less than significant impact on noise based on: 1) the project is not anticipated to change traffic; 2) Proposed construction duration is temporary; and 3) construction of the project would use proposed minimization methods. No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with the City of Sacramento Codes and would be short term and intermittent.

QUESTIONS D THROUGH F

The project site is level, and does not include buildings or structures that would require unusual construction techniques that would cause substantial vibration. The project would not result in additional significant environmental effects. Substantial levels of vibration are not anticipated because traffic volumes will be similar to the existing situation.

The project would generate some vibration due to construction activities, but it would not include construction activities that could generate significant ground vibration, such as pile driving. There are no historic structures within the project area that would be affected by construction-related vibration, this impact would not exceed the impact disclosed in the Master EIR.

MITIGATION MEASURES

None required.

Findings

All additional significant environmental effects of the project relating to Noise can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p>8. PUBLIC SERVICES</p> <p>Would the project result in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan?</p>			X

Environmental Setting

Fire

The City of Sacramento provides fire protection services, to the project area and it is likely that the project would be served by Fire Station 17. Fire Station 17 is located at 1311 Bell Avenue approximately 1.25 miles from the proposed project site. The Fire Department operates approximately 21 stations. Fire stations are located so as to provide a maximum effective service radius of two miles (SGPU DEIR, M-1). This service radius virtually assures blanket coverage of the City. Typical response time to fire calls is four minutes (SGPU DEIR, M-1).

Police

The City of Sacramento provides police protection service approximately 3 miles from the project area. The William J. Kinney Police Facility is the police station that would service the project area. It is located at 3550 Marysville Boulevard.

School District

The proposed project site is within the Robla Elementary School District and the Twin Rivers Unified School District. The proposed project area is located approximately 1.5 miles from Robla Elementary School.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential effects of the 2035 General Plan on various public services. These include parks (Chapter 6.9) and police, fire protection, schools, libraries and emergency services (Chapter 6.10).

The general plan provides that adequate staffing levels for police and fire are important for the long-term health, safety and well-being of the community (Goal PHS 1.1, PHS 2.1). The Master EIR concluded that effects would be less than significant.

General plan policies that call for the City to consider impacts of new development on schools (see, for example, Policy ERC 1.1.2 setting forth locational criteria, and Policy ERC 1.1.5 that encourages joint-use development of facilities) reduced impacts on schools to a less-than-significant level. Impacts on library facilities were also considered less than significant (Impact 6.10-8).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

The project would not result in the need for new public services beyond what was anticipated in the 2035 General Plan. The project does not propose a new housing or commercial development requiring additional school facilities, police, and/or fire services. Road maintenance would continue along the new extension of Vinci Avenue, as is currently done with the existing. Vinci Avenue is classified as a “Collector” street in the City of Sacramento 2035 General Plan. The proposed project is consistent with the City of Sacramento General Plan as it will continue to be a “collector” street and the project would not change the zoning designation of adjacent areas. The proposed project is consistent with the General Plan and land use designations for the project site. Impacts of development that could be anticipated pursuant to the general plan were evaluated in the Master EIR. Cumulative effects of development on public services were discussed and evaluated. See Master EIR Chapter 6.10.

The impact would be less than significant. Therefore, the proposed project would not result in an additional significant impact that was not addressed or considered in the Master EIR.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Public Services.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
9. <u>RECREATION</u> Would the project:			
A) Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?			X
B) Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan?			X

ENVIRONMENTAL SETTING

The North Sacramento area is served by a variety of recreational resources. Recreational resources include rivers, ponds, bike trails, and parks maintained by the City of Sacramento. The nearest recreational resource is the Sacramento Northern Bike Trail which is located approximately 0.5 miles west of the project area.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to recreational resources are considered significant if the proposed project would do either of the following:

- cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.9 of the Master EIR considered the effects of the 2035 General Plan on the City's existing parkland, urban forest, recreational facilities and recreational services. The general plan identified a goal of providing an integrated park and recreation system in the City (Goal ERC 2.1). New residential development will be required to dedicate land, pay in-lieu fees or otherwise contribute a fair share to the acquisition and development of parks and recreation facilities. (Policy ERC 2.2.4) Impacts were considered less than significant after application of the applicable policies. (Impacts 6.9-1 and 6.9-2)

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None required.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A AND B

The project would not cause or accelerate substantial physical deterioration of existing area parks or recreational facilities.

As bridge and roadway improvements, the project does not propose new residential or commercial developments creating a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan therefore, the proposed project would not result in additional significant impacts on recreation that were not addressed or considered in the Master EIR.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Recreation.

Issues:	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
10. TRANSPORTATION AND CIRCULATION			
Would the project:			
A) Roadway segments: degrade peak period Level of Service (LOS) from A,B,C or D (without the project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.			X
B) Intersections: degrade peak period level of service from A, B, C or D (without project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.?			X
C) Freeway facilities: off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway; project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service; project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or the expected ramp queue is greater than the storage capacity?			X
D) Transit: adversely affect public transit operations or fail to adequately provide for access to public?			X
E) Bicycle facilities: adversely affect bicycle travel, bicycle paths or fail to adequately provide for access by bicycle?			X
F) Pedestrian: adversely affect pedestrian travel, pedestrian paths or fail to adequately provide for access by pedestrians?			X

ENVIRONMENTAL SETTING

The project site is located on Vinci Avenue and extends approximately 0.40 miles between Dry Creek Road and Raley Boulevard, in the City of Sacramento. The Vinci bridge currently has no shoulders, and 30-inch metal railings, a substandard condition which is in violation of City standards. The project will incorporate a 6-foot wide sidewalk and a 2-foot wide shoulder on the

bridge, which is consistent with current City standards. The project will also incorporate a 6-foot wide sidewalk along the northern portion of Vinci Avenue. Connecting both sides of the bridge to Vinci Avenue will open the east-west bridge to traffic, providing better access to Raley Boulevard and Interstate 80 which will alleviate local vehicular congestion and greatly improve safety conditions for both vehicles and pedestrians.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policy would avoid or lessen environmental impacts as identified in the Master EIR and is considered a mitigation measure for the following project-level and cumulative impacts.

Impact 6.12-1: Implementation of the 2035 General Plan could result in roadway segments located within the Policy Area that do not meet the City's current Level of Service (LOS) standard or the LOS D goal.

and

Impact 6.12-8: Implementation of the 2035 General Plan could result in a cumulative increase in traffic that would adversely impact the existing LOS for City roadways.

Mitigation Measure 6.12-1 - General Plan Policy M 1.2.2 Level of Service (LOS) Standard. The City shall implement a flexible context- sensitive Level of Service (LOS) standard, and will measure traffic operations against the vehicle LOS thresholds established in this policy. The City will measure Vehicle LOS based on the methodology contained in the latest version of the *Highway Capacity Manual* (HCM) published by the Transportation Research Board. The City's specific vehicle LOS thresholds have been defined based on community values with respect to modal priorities, land use context, economic development, and environmental resources and constraints. As such, the City has established variable LOS thresholds appropriate for the unique characteristics of the City's diverse neighborhoods and communities. The City will strive to operate the roadway network at LOS D or better for vehicles during typical weekday conditions, including AM and PM peak hour conditions with the following exceptions described below and mapped on Figure M-1:

- A. Core Area (Central City Community Plan Area) - LOS F allowed
- B. Priority Investment Areas – LOS F allowed
- C. LOS E Roadways - LOS E is allowed for the following roadways because expansion of the roadways would cause undesirable impacts or conflict with other community values.

- 65th Street: Elvas Avenue to 14th Avenue
- Arden Way: Royal Oaks Drive to I-80 Business
- Broadway: Stockton Boulevard to 65th Street
- College Town Drive: Hornet Drive to La Rivera Drive
- El Camino Avenue: I-80 Business to Howe Avenue
- Elder Creek Road: Stockton Boulevard to Florin Perkins Road
- Elder Creek Road: South Watt Avenue to Hedge Avenue
- Fruitridge Road: Franklin Boulevard to SR 99
- Fruitridge Road: SR 99 to 44th Street
- Howe Avenue: El Camino Avenue to Auburn Boulevard
- Sutterville Road: Riverside Boulevard to Freeport Boulevard

D. LOS E is also allowed on all roadway segments and associated intersections located within ½ mile walking distance of light rail stations.

E. Other LOS F Roadways - LOS F is allowed for the following roadways because expansion of the roadways would cause undesirable impacts or conflict with other community values.

- 47th Avenue: State Route 99 to Stockton Boulevard
- Arcade Boulevard: Marysville Boulevard to Roseville Road
- Carlson Drive: Moddison Avenue to H Street
- El Camino Avenue: Grove Avenue to Del Paso Boulevard
- Elvas Avenue: J Street to Folsom Boulevard
- Elvas Avenue/56th Street: 52nd Street to H Street
- Florin Road: Havenside Drive to Interstate 5
- Florin Road: Freeport Boulevard to Franklin Boulevard
- Florin Road: Interstate 5 to Freeport Boulevard
- Folsom Boulevard: 47th Street to 65th Street
- Folsom Boulevard: Howe Avenue to Jackson Highway
- Folsom Boulevard: US 50 to Howe Avenue
- Freeport Boulevard: Sutterville Road (North) to Sutterville Road (South)
- Freeport Boulevard: 21st Street to Sutterville Road (North)
- Freeport Boulevard: Broadway to 21st Street
- Garden Highway: Truxel Road to Northgate Boulevard
- H Street: Alhambra Boulevard to 45th Street
- H Street 45th: Street to Carlson Drive
- Hornet Drive: US 50 Westbound On-ramp to Folsom Boulevard
- Howe Avenue: US 50 to Fair Oaks Boulevard
- Howe Avenue: US 50 to 14th Avenue
- Raley Boulevard: Bell Avenue to Interstate 80
- South Watt Avenue: US 50 to Kiefer Boulevard (V/C: 1.19)
- West El Camino Avenue: Northgate Boulevard to Grove Avenue

F. If maintaining the above LOS standards would, in the City's judgment be infeasible and/or conflict with the achievement of other goals, LOS E or F conditions may be accepted provided that provisions are made to improve the overall system, promote non-vehicular transportation, and/or implement vehicle trip reduction measures as part of a development project or a city-initiated project. Additionally the City shall not expand the physical capacity of the planned roadway network to accommodate a project beyond that identified in Figure M4 and M4a (2035 General Plan Roadway Classification and Lanes).

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts resulting from changes in transportation or circulation may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

Roadway Segments

- A) the traffic generated by a project degrades peak period Level of Service (LOS) from A,B,C or D (without the project) to E or F (with project) or
- B) the LOS (without project) is E or F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.

Intersections

- the traffic generated by a project degrades peak period level of service from A, B, C or D (without project) to E or F (with project) or
- the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.

Freeway Facilities

Caltrans considers the following to be significant impacts.

- off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway;
- project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service;
- project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or
- the expected ramp queue is greater than the storage capacity.

Transit

- adversely affect public transit operations or
- fail to adequately provide for access to public transit.

Bicycle Facilities

- adversely affect bicycle travel, bicycle paths or
- fail to adequately provide for access by bicycle.

Pedestrian Circulation

- adversely affect pedestrian travel, pedestrian paths or
- fail to adequately provide for access by pedestrians.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Transportation and circulation were discussed in the Master EIR in Chapter 6.12. Various modes of travel were included in the analysis, including vehicular, transit, bicycle, pedestrian and aviation components. The analysis included consideration of roadway capacity and identification of levels of service, and effects of the 2035 General Plan on the public transportation system. Provisions of the 2035 General Plan that provide substantial guidance include Goal Mobility 1.1, calling for a transportation system that is effectively planned, managed, operated and maintained, promotion of multimodal choices (Policy M 1.2.1), identification of level of service standards (Policy M 1.2.2), development of a fair share funding system for Caltrans facilities (Policy M 1.5.6) and development of complete streets (Goal M 4.2). While the general plan includes numerous policies that direct the development of the City's transportation system, the Master EIR concluded that the general plan development would result in significant and unavoidable effects. See Impacts 6.12-1, 6.12-8 (roadway segments in the City), Impacts 6.12-2, 6.12-9 (roadway segments in neighboring jurisdictions), and Impacts 6.12-3, 6.12-10 (freeway segments).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A THROUGH C

It is anticipated that long-term traffic operations would not be adversely affected by the proposed project. The project will reduce truck traffic within residential areas by providing easier access to I-80. The proposed project is consistent with the City of Sacramento General Plan as Vinci Avenue will be a continued east- west two way roadway. One through-lane will be provided in each direction along Vinci Avenue during construction to accommodate regular traffic.

The proposed land use is consistent with the existing land use designation in the General Plan and generally consistent with the land use designation in the Community Plan. The project is not anticipated to create additional vehicle trips. Therefore, no additional volume would be generated and would not result in any new traffic impacts.

While construction of the proposed project would generate short-term impacts through the intersection of Dry Creek Road and Vinci Avenue, construction activities would be temporary, intermittent, and have a minimal impact on surrounding traffic flows. Sacramento City Code Section 12.20.020 requires each project to prepare a traffic management plan subject to review and approval of Department of Public Works. With that short-term construction impacts are considered less than significant. Vinci Avenue is approximately 1.5 miles from I-80 which can be accessed directly from Raley Boulevard. The proposed project would not adversely affect the operations of any freeway facility. Dry Creek Road and Vinci Avenue would remain open during construction to maintain access to local businesses. Prior to construction signage and other construction related information for continuing traffic operations will be established through the project site.

QUESTIONS D THROUGH F

The proposed project development would not conflict with transit, bicycle, or pedestrian facilities. While pedestrian use is not substantial along Vinci Avenue or at the intersection of Dry Creek Road and Vinci Avenue, the proposed project will provide pedestrian connection to nearby roadway.

MITIGATION MEASURES

FINDINGS

The project would have no additional project-specific environmental effects relating to Transportation and Circulation.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
11. UTILITIES AND SERVICE SYSTEMS			
Would the project:			
A) Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments?			X
B) Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?			X

ENVIRONMENTAL SETTING

Existing utilities within the project limits include natural gas, water, sewer, and telecommunications service. Natural gas is provided by Pacific Gas and Electric Company (PG&E). The City provides municipal water service, and wastewater collection (sewer) within the project area. Telecommunications services in the project area are provided by AT&T.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, or school facilities beyond what was anticipated in the 2035 General Plan:

- result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments or
- require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the effects of development under the 2035 General Plan on water supply, sewer and storm drainage, solid waste, electricity, natural gas and telecommunications. See Chapter 6.11.

The Master EIR evaluated the impacts of increased demand for water that would occur with development under the 2035 General Plan. Policies in the general plan would reduce the impact generally to a less-than-significant level (see Impact 6.11-1) but the need for new water supply facilities results in a significant and unavoidable effect (Impact 6.11-2). The potential need for expansion of wastewater treatment facilities was identified as having a significant and unavoidable effect (Impacts 6.11-4, 6.11-5) Impacts on solid waste facilities were less than significant (Impacts 6.11-7, 6.11-8). Implementation of energy efficient standards as set forth in

Titles 20 and 24 of the California Code of Regulations for residential and non-residential buildings, would reduce effects for energy to a less-than-significant level.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None available.

ANSWERS TO CHECKLIST QUESTIONS

The proposed project is consistent with the General Plan roadway designations and zoning for the project site and would not create a demand for new utility facilities during construction or operation. During construction, the project would generate solid waste as a result of demolition of the old bridge and roadway, and removal of debris. Construction and demolition waste would be disposed of at a landfill based on market conditions and capacity.

New drainage swales will be installed along the proposed Vinci Avenue road extension that will be consistent with the current drainage design. One standard street light located on Vinci Avenue will also be relocated within the existing sidewalk to accommodate the extended roadway. No other utilities are expected to be removed or relocated within the project area, therefore no additional significant environmental effect will occur.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Utilities and Service Systems.

MANDATORY FINDINGS OF SIGNIFICANCE

Issues:	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
12. 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X	
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.)			X
C.) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X

Answers to Checklist Questions

QUESTION A

As discussed in this study, the proposed project could result in impacts on biological resources, and potential impacts on cultural resources. Construction on and around the bridge would also result in temporary construction noise impacts. Mitigation measures included in this study would reduce the impacts to less-than-significant levels.

There is no potential for Federal or State threatened or endangered species to occur within the project area and no designated Critical Habitat occurs within the project vicinity. There is a low to moderate potential for Swainson’s hawk, a State-threatened species, white-tailed kite, a State Species of Special Concern, western pond turtle, a State Species of Special Concern, giant garter snake, a Federal and State threatened species, and bank swallow, a State threatened species, to occur within the project area. Considering the amount of development and hardscape in the project area, the current frequency and volume of human activity, the amount of affected foraging habitat within the project limits, anticipated absence of species nesting, and

the implementation of mitigation measures as well as best management practices, the project will not impact the viability of the overall population.

No cultural or historic resources have been identified on the project site, and mitigation would ensure that discovery of unknown resources during project development would be identified and appropriate steps taken regarding treatment.

QUESTION B

The proposed project is consistent with the General Plan and the findings in the Master EIR and would not result in individually limited but collectively significant impacts. Therefore, the project would not cause any additional environmental effects.

QUESTION C

As described in the resource sections of the Initial Study, the project would not result in either direct or indirect substantial adverse effects on human beings.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this project.

	Aesthetics		Hazards
X	Air Quality		Noise
X	Biological Resources		Public Services
X	Cultural Resources		Recreation
	Energy and Mineral Resources		Transportation/Circulation
	Geology and Soils		Utilities and Service Systems
	Hydrology and Water Quality		
	None Identified		

SECTION V - DETERMINATION

On the basis of the initial study:

- X I find that (a) the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master EIR; (b) the proposed project is consistent with the 2035 General Plan land use designation and the permissible densities and intensities of use for the project site; (c) that the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the Master EIR are adequate for the proposed project; and (d) the proposed project will have additional significant environmental effects not previously examined in the Master EIR. A Mitigated Negative Declaration will be prepared. Mitigation measures from the Master EIR will be applied to the project as appropriate, and additional feasible mitigation measures and alternatives will be incorporated to revise the proposed project before the negative declaration is circulated for public review, to avoid or mitigate the identified effects to a level of insignificance. (CEQA Guidelines Section 15178(b))



Signature

Date

Dana Mahaffey
Printed Name

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APPENDIX A



Photograph 1: Representative Magpie Creek drainage channel, concrete lined creek bed and current bridge conditions in March; south of the Vinci Avenue Bridge, facing northwest.



Photograph 2: Representative hardscape and industrial use; looking west at the proposed road extension and realignment area east of Raley Boulevard.



Photograph 3: Representative Magpie Creek drainage channel, concrete lined banks and riparian vegetation in March; north of the Vinci Avenue Bridge facing north. No impacts to riparian habitat will occur.



Photograph 4: Representative grassland and ruderal vegetation; west of the Vinci Avenue Bridge, facing east.



Photograph 5: Representative hardscape and industrial/suburban residential use; east of the Vinci Avenue Bridge, facing west.

APPENDIX B

Road Construction Emissions Model, Version 7.1.5.1

Emission Estimates for -> Vinci Avenue Bridge Improvements											
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)	
Grubbing/Land Clearing	1.7	9.7	16.9	10.8	0.8	10.0	2.8	0.7	2.1	1,902.4	
Grading/Excavation	6.8	34.0	69.3	13.4	3.4	10.0	5.1	3.0	2.1	6,952.6	
Drainage/Utilities/Sub-Grade	5.8	28.3	51.0	13.0	3.0	10.0	4.8	2.7	2.1	5,413.6	
Paving	2.1	11.5	17.5	1.1	1.1	-	1.0	1.0	-	1,977.3	
Maximum (pounds/day)	6.8	34.0	69.3	13.4	3.4	10.0	5.1	3.0	2.1	6,952.6	
Total (tons/construction project)	0.2	0.9	1.6	0.4	0.1	0.3	0.1	0.1	0.1	170.4	

Notes: Project Start Year -> 2015

Project Length (months) -> 3

Total Project Area (acres) -> 11

Maximum Area Disturbed/Day (acres) -> 1

Total Soil Imported/Exported (yd³/day) -> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Vinci Avenue Bridge Improvements											
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	Total PM10 (kgs/day)	Exhaust PM10 (kgs/day)	Fugitive Dust PM10 (kgs/day)	Total PM2.5 (kgs/day)	Exhaust PM2.5 (kgs/day)	Fugitive Dust PM2.5 (kgs/day)	CO2 (kgs/day)	
Grubbing/Land Clearing	0.8	4.4	7.7	4.9	0.3	4.5	1.3	0.3	0.9	864.7	
Grading/Excavation	3.1	15.5	31.5	6.1	1.5	4.5	2.3	1.4	0.9	3,160.3	
Drainage/Utilities/Sub-Grade	2.6	12.9	23.2	5.9	1.3	4.5	2.2	1.2	0.9	2,460.7	
Paving	1.0	5.2	7.9	0.5	0.5	-	0.5	0.5	-	898.8	
Maximum (kilograms/day)	3.1	15.5	31.5	6.1	1.5	4.5	2.3	1.4	0.9	3,160.3	
Total (megagrams/construction project)	0.2	0.8	1.5	0.3	0.1	0.3	0.1	0.1	0.1	154.5	

Notes: Project Start Year -> 2015

Project Length (months) -> 3

Total Project Area (hectares) -> 4

Maximum Area Disturbed/Day (hectares) -> 0

Total Soil Imported/Exported (meters³/day) -> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

APPENDIX C



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad is (Rio Linda (3812164) or Carmichael (3812153) or Citrus Heights (3812163) or Sacramento East (3812154) or Sacramento West (3812155) or Taylor Monument (3812165))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Ahart's dwarf rush <i>Juncus leiospermus var. ahartii</i>	PMJUN011L1	None	None	G2T1	S1	1B.2
American badger <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S3	SSC
an andrenid bee <i>Andrena subapasta</i>	IIHYM35210	None	None	G1G2	S1S2	
bank swallow <i>Riparia riparia</i>	ABPAU08010	None	Threatened	G5	S2	
black-crowned night heron <i>Nycticorax nycticorax</i>	ABNGA11010	None	None	G5	S4	
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	PDSCR0R060	None	Endangered	G2	S2	1B.2
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
California linderiella <i>Linderiella occidentalis</i>	ICBRA06010	None	None	G2G3	S2S3	
chinook salmon - Central Valley spring-run ESU <i>Oncorhynchus tshawytscha</i>	AFCHA0205A	Threatened	Threatened	G5	S1	
chinook salmon - Sacramento River winter-run ESU <i>Oncorhynchus tshawytscha</i>	AFCHA0205B	Endangered	Endangered	G5	S1	
Cooper's hawk <i>Accipiter cooperii</i>	ABNKC12040	None	None	G5	S4	WL
dwarf downingia <i>Downingia pusilla</i>	PDCAM060C0	None	None	GU	S2	2B.2
Elderberry Savanna <i>Elderberry Savanna</i>	CTT63440CA	None	None	G2	S2.1	
Ferris' milk-vetch <i>Astragalus tener var. ferrisiae</i>	PDFAB0F8R3	None	None	G2T1	S1	1B.1
ferruginous hawk <i>Buteo regalis</i>	ABNKC19120	None	None	G4	S3S4	WL
giant garter snake <i>Thamnophis gigas</i>	ARADB36150	Threatened	Threatened	G2	S2	
golden eagle <i>Aquila chrysaetos</i>	ABNKC22010	None	None	G5	S3	FP
great blue heron <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
great egret <i>Ardea alba</i>	ABNGA04040	None	None	G5	S4	



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Great Valley Cottonwood Riparian Forest <i>Great Valley Cottonwood Riparian Forest</i>	CTT61410CA	None	None	G2	S2.1	
hairy water flea <i>Dumontia oregonensis</i>	ICBRA23010	None	None	G1G3	S1	
hoary bat <i>Lasiurus cinereus</i>	AMACC05030	None	None	G5	S4	
least Bell's vireo <i>Vireo bellii pusillus</i>	ABPBW01114	Endangered	Endangered	G5T2	S2	
legenere <i>Legenere limosa</i>	PDCAM0C010	None	None	G2	S2	1B.1
longfin smelt <i>Spirinchus thaleichthys</i>	AFCHB03010	Candidate	Threatened	G5	S1	SSC
midvalley fairy shrimp <i>Branchinecta mesovallensis</i>	ICBRA03150	None	None	G2	S2	
Northern Claypan Vernal Pool <i>Northern Claypan Vernal Pool</i>	CTT44120CA	None	None	G1	S1.1	
Northern Hardpan Vernal Pool <i>Northern Hardpan Vernal Pool</i>	CTT44110CA	None	None	G3	S3.1	
Northern Volcanic Mud Flow Vernal Pool <i>Northern Volcanic Mud Flow Vernal Pool</i>	CTT44132CA	None	None	G1	S1.1	
purple martin <i>Progne subis</i>	ABPAU01010	None	None	G5	S3	SSC
Ricksecker's water scavenger beetle <i>Hydrochara rickseckeri</i>	IICOL5V010	None	None	G2?	S2?	
Sacramento Orcutt grass <i>Orcuttia viscida</i>	PMPOA4G070	Endangered	Endangered	G1	S1	1B.1
Sacramento perch <i>Archoplites interruptus</i>	AFCQB07010	None	None	G2G3	S1	SSC
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	AFCJB34020	None	None	G2	S2	SSC
Sacramento Valley tiger beetle <i>Cicindela hirticollis abrupta</i>	IICOL02106	None	None	G5TH	SH	
Sanford's arrowhead <i>Sagittaria sanfordii</i>	PMALI040Q0	None	None	G3	S3	1B.2
snowy egret <i>Egretta thula</i>	ABNGA06030	None	None	G5	S4	
song sparrow ("Modesto" population) <i>Melospiza melodia</i>	ABPBXA3010	None	None	G5	S3?	SSC
steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i>	AFCHA0209K	Threatened	None	G5T2Q	S2	
stinkbells <i>Fritillaria agrestis</i>	PMLIL0V010	None	None	G3	S3	4.2



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Suisun Marsh aster <i>Symphotrichum lentum</i>	PDASTE8470	None	None	G2	S2	1B.2
Swainson's hawk <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Endangered	G2G3	S1S2	SSC
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T2	S2	
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened	None	G3	S2S3	
vernal pool tadpole shrimp <i>Lepidurus packardii</i>	ICBRA10010	Endangered	None	G3	S2S3	
western pond turtle <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot <i>Spea hammondi</i>	AAABF02020	None	None	G3	S3	SSC
white-tailed kite <i>Elanus leucurus</i>	ABNKC06010	None	None	G5	S3S4	FP
woolly rose-mallow <i>Hibiscus lasiocarpus var. occidentalis</i>	PDMAL0H0R3	None	None	G5T2	S2	1B.2

Record Count: 50

CNPS

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank	CESA	FESA	Elevation High (meters)	Elevation Low (meters)	CA Endemic
<i>Astragalus tener</i> var. <i>ferrisiae</i>	Ferris' milk-vetch	Fabaceae	annual herb	1B.1	S1	G2T1	None	None	75	2	T
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	Asteraceae	perennial herb	1B.2	S2	G2	None	None	1555	90	T
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	Asteraceae	annual herb		4.2 S3	G3T3	None	None	100	0	T
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.1	S2	G2T2	None	None	155	1	T
<i>Downingia pusilla</i>	dwarf downingia	Campanulaceae	annual herb	2B.2	S2	GU	None	None	445	1	F
<i>Fritillaria agrestis</i>	stinkbells	Liliaceae	perennial bulbiferous herb		4.2 S3	G3	None	None	1555	10	T
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	S2	G2	CE	None	2375	10	F
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb	1B.2	S2	G5T2	None	None	120	0	T
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	Juncaceae	annual herb	1B.2	S1	G2T1	None	None	229	30	T
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	Juncaceae	annual herb	1B.1	S2	G2T2	None	None	1250	35	T
<i>Legenere limosa</i>	legenere	Campanulaceae	annual herb	1B.1	S2	G2	None	None	880	1	T
<i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i>	adobe navarretia	Polemoniaceae	annual herb		4.2 S3	G4T3	None	None	1000	100	T
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb	1B.2	S3	G3	None	None	650	0	T
<i>Symphotrichum lentum</i>	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	1B.2	S2	G2	None	None	3	0	T

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
RIO LINDA (512B)
U.S.G.S. 7 1/2 Minute Quad**

Report Date: March 10, 2015

Listed Species

Invertebrates

Branchinecta lynchi

vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus

valley elderberry longhorn beetle (T)

Lepidurus packardii

vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus

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)

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

Amphibians

Ambystoma californiense

California tiger salamander, central population (T)

Rana draytonii

California red-legged frog (T)

Reptiles

Thamnophis gigas

giant garter snake (T)

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

APPENDIX D

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Vinci Ave City/County: Sacramento Sampling Date: 3/20/2015
 Applicant/Owner: City of Sacramento State: CA Sampling Point: SPI
 Investigator(s): Scott Sakmbier / Sarah Holm Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1%
 Subregion (LRR): Sacramento Valley Lat: 38°39'55.68" N Long: 121°25'52.75" W Datum: _____
 Soil Map Unit Name: San Joaquin sandy loam, 0 to 3 percent slopes NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: <u>4th year of drought conditions. Lots of trash present & overrun with invasive species. Much of trash is rusting.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____				
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species <u>40</u> x 3 = <u>120</u>
5. _____				FACU species <u>1</u> x 4 = <u>4</u>
<u>0</u> = Total Cover				UPL species <u>60</u> x 5 = <u>300</u>
				Column Totals: <u>101</u> (A) <u>424</u> (B)
				Prevalence Index = B/A = <u>4.2</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Erodium botrys</u>	<u><1%</u>	<u>NO</u>	<u>FACU</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>Lolium perenn</u>	<u>40</u>	<u>YES</u>	<u>FAC</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 ¹
3. <u>Taeniatherium caput medusae</u>	<u>60</u>	<u>YES</u>	<u>UPL</u>	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____				
6. _____				
7. _____				
8. _____				
<u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>20</u>				
Hydrophytic Vegetation Present? Yes _____ No <u>X</u>				

Remarks: much of veg is dead from last year

SOIL

Sampling Point: SP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	2.5Y 4/2	100%						mixed w/ organics
3-10	10YR 4/2	99%	5YR 4/6	1%	C	M	Silty sandy clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): yes

Type: rock
Depth (inches): ~10"

Hydric Soil Present? Yes No

Remarks:

Large amounts of rusted metal found within ditch, much of apparent redox is associated with trash

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Vinci Ave City/County: Sacramento Sampling Date: 3/20/15
 Applicant/Owner: City of Sacramento State: CA Sampling Point: SP2
 Investigator(s): Scott S / Sarah H Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 2
 Subregion (LRR): Sacramento Valley Lat: 38°39'55.65" N Long: 121°25'52.37" W Datum: _____
 Soil Map Unit Name: Sin Joaquin sandy loam, 0 to 3 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>4th year of drought. scrap metal and garbage buried throughout study area</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>1</u>
4. _____	_____	_____	_____	FAC species <u>60</u> x 3 = <u>180</u>
5. _____	_____	_____	_____	FACU species <u>6</u> x 4 = <u>24</u>
_____ = Total Cover				UPL species <u>41</u> x 5 = <u>205</u>
				Column Totals: <u>107</u> (A) <u>409</u> (B)
				Prevalence Index = B/A = <u>3.8</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Lolium perenne</u>	<u>60%</u>	<u>Yes</u>	<u>FAC</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>Red-stemmed filaree</u>	<u>2%</u>	<u>No</u>	<u>UPL</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 ¹
3. <u>Taraxacum caput medusae</u>	<u>35%</u>	<u>Yes</u>	<u>UPL</u>	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. <u>Bedstraw</u>	<u>1%</u>	<u>No</u>	<u>UPL</u>	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u>Vetch</u>	<u>2%</u>	<u>No</u>	<u>UPL</u>	
6. <u>Erodium botrys</u>	<u>1%</u>	<u>No</u>	<u>FACU</u>	
7. <u>Star thistle</u>	<u>1%</u>	<u>No</u>	<u>UPL</u>	
8. <u>Soft chess</u>	<u>5%</u>	<u>No</u>	<u>FACU</u>	
<u>7100%</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				
Remarks: _____				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>

SOIL

Sampling Point: SP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1"		100%					clay loam mixed w/organics	
2-12"	10YR 4/2	90%	7.5YR 5/8	10%		PL	Silty sandy clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): no dug to ~18"

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks: sandy layer >12"

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Biotic Crust (B12) <u><50%</u>
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input checked="" type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? Yes No Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Vinci Ave. City/County: Sacramento Sampling Date: 3/20/15
 Applicant/Owner: City of Sacramento State: CA Sampling Point: SP3
 Investigator(s): Scott S / Sarah H Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): perched flood plain Local relief (concave, convex, none): concave Slope (%): 2
 Subregion (LRR): sacramento valley Lat: 38°39' 55.55 N Long: 121° 25' 53.27 W Datum: _____
 Soil Map Unit Name: San Joaquin fine sandy loam, 0 to 3 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: <u>4th year of drought. Lots of scrap metal and other debris found on and within soils. High levels of artificially introduced iron.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>.66</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
= Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>Erodium botrys</u>	<u>10</u>	_____	<u>FACU</u>	
2. <u>Festuca bromoides</u>	<u>35</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Rumex crispus</u>	<u>3</u>	_____	<u>FAC</u>	
4. <u>Trifolium hirtum</u>	<u>1</u>	_____	<u>UPL</u>	
5. <u>Festuca perennis</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	
6. <u>Elymus caput-medusae</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
7. <u>Hordeum murinum</u>	<u>1</u>	_____	<u>FACU</u>	
8. _____	_____	_____	_____	
= Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____		
Hydrophytic Vegetation Present? Yes <u>X</u> No _____				

Remarks: _____

SOIL

Sampling Point: SP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1	10YR ² / ₁	100%						mixed w/ organics
1-10	2.5Y ⁴ / ₂	100%					sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

Secondary Indicators (2 or more required)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)
- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX E

DRAFT

CULTURAL RESOURCES SURVEY AND INVENTORY REPORT FOR THE VINCI AVENUE BRIDGE IMPROVEMENTS PROJECT, CITY OF SACRAMENTO, CALIFORNIA

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February 2015



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Summary of Findings

This report, *Draft Cultural Resources Survey and Inventory Report for the Vinci Avenue Bridge Improvements Project, City of Sacramento, California*, documents a survey and inventory for cultural resources for the Vinci Avenue Bridge Improvements Project (Project), conducted by ICF in April and May of 2014. The study was conducted on behalf of the City of Sacramento (City) Department of Public Works, Sacramento County, California, who proposed to replace the existing bridge guardrail and construct new roadway approaches at the Vinci Avenue Bridge (Bridge Number 24C0224, built 1970), located within the City of Sacramento (City). Because the Project requires a 404 Permit from the United States Army Corps of Engineers (USACE), it is considered a federal undertaking. Therefore, this study was conducted in compliance with the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), California Environmental Quality Act (CEQA), and in accordance with industry standards for similar projects in the region. This study consisted of: an archival records search, coordination with the California Native American Heritage Commission (NAHC) and Sacramento County Historic Society, and an intensive archaeological pedestrian survey. The purpose of the study was to assess the potential for the Project to affect cultural resources potentially eligible for listing in the National Register of Historic Places (NRHP) or any resources considered historic for the purposes of NEPA or CEQA.

The records searches and literature review identified only one previously recorded cultural resource (CA-SAC-519H) within the Project Area of Potential Effects (APE)—only a portion of the resource is located within the APE. The resource is the Magpie Creek Diversion Channel (MCDC). The resource had not previously been evaluated for eligibility for listing in the NRHP or California Register of Historical Resources (CRHR). As part of this study ICF evaluated the resource for NRHP- and CRHR-eligibility.

ICF contacted the NAHC in March 2014 and February 2015 to identify any areas of concern within the APE that may be listed in the NAHC's Sacred Lands File (SLF), and to provide a list of Native American representatives who may have interest in the Project. The NAHC replied in April 2014 and February 2015, respectively, stating that the SLF contains no record of any cultural resources within or near the APE. In February 2015, ICF sent letters to each of the 13 Native American representatives identified by the NAHC in the February 2015 response as having possible interest in the Project representatives, requesting that they notify ICF if they have concerns regarding the Project. To date, ICF has received no response from these letters, and will make follow-up phone calls to the 13 representatives in mid-March 2015. The final version of this report will include any additional correspondence received by ICF between the submittal of this draft and submittal of the final report.

ICF conducted an archaeological sensitivity analysis for the APE, determining that the potential for both intact and subsurface archaeological deposits is low. This determination results from the fact that the entire APE has experienced a large degree of previous ground disturbance from historic-period and modern development activities, and that no archaeological deposits were identified during the archaeological field survey conducted for the present study.

In April 2014, and in February 2015, an ICF archaeologist and architectural historian conducted a cultural resources pedestrian survey for identifying archaeological and architectural resources. During the survey, one cultural resource 45 years or older, the previously recorded segment of architectural resource CA-SAC-519H (MCDC) was identified within the original APE. An ICF architectural historian then evaluated the resource under NRHP and CRHR Criteria, recommending it as not eligible for either the NRHP or CRHR. As such no historic properties, for NHPA purposes, or

historical resources, for CEQA purposes, were identified within the APE. Therefore, ICF does not foresee that the Project will result in any impacts to NRHP- or CRHR-eligible resources. ICF does not recommend further study or mitigation for cultural resources for the Project. Based on this study, ICF anticipates a Finding of ***No Historic Properties Affected*** for the Project.

As stipulated in CEQA, the California Health and Safety Code (HSC), and the California Public Resources Code (PRC), the accidental discovery of unexpected cultural materials or human remains during construction grading or trenching will require a work stoppage in the immediate area of the discovery until it is evaluated by a qualified archaeologist. Given the fact that archaeological construction monitoring is not recommended, it is suggested that Project personnel be educated regarding cultural resources and have in place a set procedure for handling accidental discoveries.

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Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
BP	years before present
Bridge	Vinci Avenue Bridge
CCR	California Code of Regulations
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
City	City of Sacramento, California
Coroner	Sacramento County Coroner
CRHR	California Register of Historical Resources
ft	foot/feet
HSC	California Health and Safety Code
ICF	ICF International
km	kilometer(s)
m	meter(s)
MCDC	Magpie Creek Diversion Channel
mi	mile(s)
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PRC	California Public Resources Code
Project	Vinci Avenue Bridge Improvements Project
Rancho	Rancho Del Paso
ROW	right-of-way
SAFCA	Sacramento Area Flood Control Agency
SLF	Sacred Lands File
State	State of California
USACE	United States Army Corps of Engineers
USC	United States Code
USGS	United States Geological Survey

Introduction

This cultural resources survey and inventory for the Vinci Avenue Bridge Improvements Project (Project) was conducted by ICF International (ICF) on behalf of the City of Sacramento (City) Department of Public Works, Sacramento County, California. The Project will replace the existing bridge guardrail and construct new roadway approaches, including widened shoulders and rehabilitated pavement, at the Vinci Ave. Bridge (Bridge Number 24C0224, built 1970; hereafter referred to as “Bridge”), located within the City of Sacramento.

This study was conducted in compliance with the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA) and its implementing regulations found in Title 36 Part 800 of the Code of Federal Regulations (CFR), California Environmental Quality Act (CEQA), and in accordance with industry standards for similar projects in the region. This study consisted of: an archival records search, coordination with the California Native American Heritage Commission (NAHC) and Sacramento County Historic Society, and an intensive archaeological pedestrian survey. The purpose of the study was to assess the potential for the Project to affect cultural resources potentially eligible for listing in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or any resources considered historic for the purposes of NEPA or CEQA.

Project Description

The City proposes the Project in order to facilitate transportation throughout the region by connecting and straightening Vinci Ave., and to encourage future development west of Magpie Creek. The completion of this road connection is specified in the City’s 2030 General Plan. Specifically, the Project will replace existing guard rails with new barrier rail and construct new approaches on either side of the Bridge.

Note, the original 2013 Project design was revised in 2014 to include the widening of Vinci Ave. and a construction staging area—this study encompasses the most recent (2014) Project design.

Project Purpose

The City proposes the Project in order to facilitate transportation throughout the region by connecting and straightening Vinci Ave., and to encourage future development west of Magpie Creek. The completion of this road connection is specified in the City’s 2030 General Plan. The Project will reopen the Bridge to vehicular traffic by extending and connecting Vinci Ave. to the Bridge over the MCDC, providing widened shoulders and rehabilitated pavement along Vinci Ave.—the Bridge has been closed to traffic for years due to substandard bridge width. Improvements to the Bridge would provide better access to Raley Blvd. and Interstate 80, and encourage future development west of the existing MCDC within the APE.

Project Location

The Project is located in the City of Sacramento, California, along Vinci Ave., from its intersection (and including the intersection) with Dry Creek Rd., to the existing west terminus of the portion of Vinci Ave. west of Raley Blvd.—this includes the existing Vinci Ave. Bridge, which spans the Magpie Creek Diversion Channel (MCDC) (Figure 1 in Appendix A). Land use surrounding the Project Area of Potential Effects (APE) includes commercial office space, light industrial, and single-home residential. Specifically, the APE is located in the NW ¼ of Section 19 within Township 9 North, Range 5 East of the Mount Diablo Base Meridian, as depicted on the Rio Linda, California 7.5-minute United States Geological Survey (USGS) topographic map (USGS 1992). The Project does not include

any properties taking, being located solely in the City right-of-way (ROW). The Project encompasses a total of 10.71 acres, consisting of a construction footprint of 2.75 acres and a construction staging area of 7.96 acres. The Project Location and Vicinity are depicted in Figures 1 and 2, respectively, in Appendix A.

Project Elements

New roadway will be constructed through a vacant site east of the Bridge to connect to the existing paved cul-de-sac on the east. Reconstruction of the existing easterly cul-de-sac will be required to provide a continuous roadway section. Additional roadway will be constructed west of the Bridge to conform to the existing Vinci Ave. terminus. West of this conform the Project will perform shoulder widening for improved safety, and the existing pavement will be rehabilitated between its current terminus west of the Bridge and the intersection with Dry Creek Rd..

No additional capacity features, such as vehicle or bike lanes, will be constructed. Existing roadside ditches will be impacted by shoulder widening and new swales will be provided with inlets to convey drainage to the existing storm drain system along Vinci Ave.. The Bridge will be modified by replacing the existing metal beam guard rail barrier with Type 26 concrete barrier rail. The Type 26 barrier will include a 6-foot (ft) sidewalk on the south side of the Bridge and a 1.66-ft concrete strip on the north side. Traffic signs and striping will be installed to warn vehicles of the narrow Bridge and roadway. Final striping design will be determined during design stage. No work is planned below the Bridge deck, though some minor excavation may need to occur below the top of the bank of the MCDC.

Project Construction Methods

Typical construction equipment would include the following:

- Backhoe;
- Loader;
- Excavator;
- Concrete saw;
- Water truck;
- Cement truck;
- Cement pump truck;
- Compactor;
- Generator;
- Paver;
- Rollers;
- Motor grader;
- Various dump trucks; and,
- Various light tools (saws, jack hammer, etc.).

Most construction-related noise would occur during demolition and paving operations and would primarily come from concrete hammers/breakers, and paving equipment. Pavement construction for new roadway and shoulder widening will require excavations of less than 2ft deep. Additional excavation up to 6ft deep will be required in isolated locations for placement of drainage facilities.

Definition of Undertaking

Since the Project would affect waters of the United States, the Project proponent (City) must meet requirements of Section 404 of the Clean Water Act, and therefore, is seeking a permit from the United States Army Corps of Engineers (USACE), Sacramento District. Because it requires a federal

permit, the Project is considered a federal undertaking, with the USACE acting as lead federal agency. The Project is also subject to State (California) environmental review, with the City acting as lead State agency. As such, the Project must comply with the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA) and its implementing regulations found in Title 36 Part 800 of the Code of Federal Regulations (CFR), and California Environmental Quality Act (CEQA).

Area of Potential Effects (APE)/Permit Area

The APE for the Project was established by ICF in consultation with the USACE, in accordance with 36 CFR Part 800 and 33 CFR Part 325 Appendix C. The APE for the Project consists of the area that would potentially be directly and physically impacted by the Project. This area includes both the horizontal and vertical maximum extents of potential impacts. For this Project, the APE encompasses areas of new construction and construction staging: the Bridge, embankment approaches, elevated approach structures, Bridge placement areas, roadway approaches, construction staging areas, and a portion of the MDCD. The APE encompasses a total of 10.71 acres, consisting of a construction footprint of 2.75 acres and a construction staging area of 7.96 acres. The vertical extents of the APE are 2ft deep for new roadway and shoulder widening pavement construction, 6ft deep for isolated locations for placement of drainage facilities, and the surface for all other portions of the Project, including the construction staging area (currently paved). The APE for both direct and indirect effects, and architectural and archaeological resources, is the same for the Project because all Project activities will take place within the City ROW and involve minimal changes to the existing viewshed. The APE is depicted in Figure 3 in Appendix A.

Literature Review

Records Search

On March 27, 2014, ICF Archaeologist Robin D. Hoffman conducted a records search for the original (2013) Project at the North Central Information Center (NCIC), at California State University, Sacramento. On February 4, 2015, Hoffman conducted a records search for the modified (2014) Project. The NCIC maintains the official records of the California Historical Resources Information System (CHRIS) of previous cultural resource studies and recorded cultural resources for Sacramento County, among other counties. The records searches consulted the CHRIS base maps of previously recorded cultural resources and previously conducted cultural resources studies for the APE and all areas within ¼-mi of the APE. Additional sources of information, including previously conducted cultural resources surveys and historic maps (USGS and General Land Office), were selectively reviewed to determine areas that have a high potential for the presence of historic-period and prehistoric sites. The following resources were reviewed:

- All available cultural resource survey and site records on file at the NCIC;
- National Register of Historic Places (NRHP) (1988 and computer listings 1966 to 2008);
- Determinations of Eligibility for the NRHP;
- California Register of Historical Resources (CRHR) (2008 to present);
- California Inventory of Historic Resources (1976);
- California State Historical Landmarks (1996);
- California Points of Historical Interest (1992);
- Historic building surveys;
- Office of Historic Preservation Archaeological Determinations of Eligibility;
- Caltrans Historic Bridge Inventory;

- Historical maps;
- Local inventories; and,
- Plat maps.

The results were collected in the following form:

- Mapped locations of previously recorded archaeological resources;
- Mapped locations of previously recorded architectural resources;
- Mapped locations of previous cultural resources studies;
- Copies of resource records for previously recorded archaeological resources;
- Copies of resource records for previously recorded architectural resources; and,
- Copies of reports from previous studies.

Tables 1 and 2 provide summaries of the previously recorded cultural resources and previous cultural resources studies identified during the records searches. Documentation on the records search can be found in Appendix B. The State Department of Parks and Recreation site record (DPR 523 forms set [site record]) for the (sole) previously recorded resource within the APE can be found in Appendix C.

Previously Recorded Cultural Resources

The records searches and literature review identified only one previously recorded cultural resource (CA-SAC-519H) within the APE or within ¼-mi thereof—a portion of the resource is located within the APE. The resource is the MCDC. Information on the resource was found in NCIC Report No. S-10874. The report incorrectly refers to the MCDC as CA-SAC-522H—the resource’s site record is filed at the NCIC as CA-SAC-519H. Although said report addressed the MCDC and assumed it was NRHP-eligible, the resource was not recorded or formally evaluated in the. As part of the current study, ICF evaluated the resource for NRHP- and CRHR-eligibility. Table 1 provides a summary of the previously recorded cultural resources identified during the records searches. All previous documentation and the site record prepared by ICF can be found in Appendix C of this report.

Note, the existing Vinci Avenue Bridge, Caltrans Bridge Number 24C0224, is located within the APE. The Bridge was constructed in 1970 and is coded in the Caltrans Historic Bridge Inventory as Category 5. The Bridge was previously evaluated by Caltrans as not eligible for listing in the NRHP or CRHR.

Table 1. Previously Recorded Cultural Resources In or Within ¼ -mi of the APE

Primary [P-34]	Trinomial [CA-SAC-]	Age	Description	Previous NRHP-/CRHR-eligibility	Recorder
000643	519H	Historic	Magpie Creek Diversion Channel/Robla Creek Levee	Not eligible (both)	Windmiller, Ric
N/A	N/A	Modern (1970)	Vinci Avenue Bridge– Caltrans Bridge# 24C0224	Not eligible	Caltrans

Previous Cultural Resources Studies

A total of four previous cultural resources studies have been conducted in or within ¼-mi of the APE. Only one (NCIC report# S-472) included some portion of the APE. A summary of these previously conducted cultural resources studies is presented in Table 2.

Table 2. Previous Cultural Resources Studies Conducted In or Within ¼-mi of the APE

NCIC Report#	Date	Author	Report Title
S-472	1991	David Chavez & Associates	<i>Cultural Resources Investigation for the Raley Boulevard Reconstruction Project, Sacramento, California</i>
S-9171	2002	Bishop, Debra	<i>Initial Study/Proposed Mitigated Negative Declaration for the Magpie Creek Flood Control Project</i>
S-10356	2009	Hatoff, Brian	<i>Robla Site</i>
S-10874	2010	URS Corporation	<i>Final Cultural Resources Technical Report Levee Geotechnical Evaluation Program Urban Levee: Sacramento River Left Bank at Freeport and Magpie Creek Drainage Canal</i>

**Shaded study included some portion of the APE*

Additional Research

ICF conducted additional research on the history of the development of the MCDC in order to document its development and identify any possible associations with important historic people, events, or engineering trends. ICF carried out the research at the Sacramento Room of the Sacramento Public Library, and the California Room at the California State Library, both in Sacramento, California. ICF also contacted the USACE library, which did not have any material associated with the MCDC.

Setting

The following natural and cultural setting for the APE provides the backdrop against which resources are evaluated for inclusion in the NRHP. The environment and geomorphology of the region provides a background on the APE, addresses the nature of environmental change, and discusses the effects that landscape evolution has had on the formation and preservation of the archaeological record. The prehistoric context describes the prehistoric archaeology of the Sacramento area and the APE. The ethnohistoric context describes the lifeways, settlement, and subsistence of prehistoric and contact period Native Americans who inhabited the APE. The historic context provides the background for the region and describes the early history of the region and the specific APE.

Natural Environment

The APE is located in the southern portion of the Sacramento Valley within the northern portion of California’s Great Valley Geomorphic Province. The Great Valley is a narrow, elongated topographic depression that is approximately 724 kilometers (km) long and 64 to 113km wide. The northern portion of the Great Valley is bordered by the Sierra Nevada plutonic complex to the east, Coast Range to the west, and Klamath and Cascade Mountains to the north. This area is primarily defined as a hydrographic unit—the contiguous watershed drained by the Sacramento River and its tributaries. This vast drainage stretches 618km, from the headwaters in the northern Sacramento Valley to the Sacramento–San Joaquin River Delta. These watercourses moved alluvium from the Sierra Nevada and the Coast Range to cover the Cenozoic non-marine basement rocks of the Valley.

The Holocene environment of the region was characterized by a general warming trend that subsumed episodes of relatively cool climates. Most paleoclimatic reconstructions for the Central Valley are based on Ernst Antevs’s (1948, 1953, 1955) three-part global climatic sequence. The sequence spans the Holocene, consisting of the moderately cool/moist Anathermal (ca. 10000–7500 years before present [BP]), the warm and dry Altithermal (ca. 7500–4000 BP), and the Medithermal (ca. 4000 BP to present). Tree-ring growth chronologies from central eastern California, glacial

chronologies, and pollen cores generally corroborate Antevs' sequence, with the caveat that California's Holocene environment exhibited regional variation (Adam 1967; Birkeland et al. 1976; Birman 1964; Curry 1969, 1970; Moratto et al. 1978; Šercelj and Adam 1975). Pollen diagrams from the Lake Tahoe and Yosemite areas indicate a vegetation shift that suggests a general increase in temperature from 9000 to 2900 BP, although six relatively cool and moist periods, each lasting 400–1500 years, punctuated the general warm and dry trend (Moratto et al. 1978:150–151). Modern average temperatures range between 13.3 and 16.7 degrees Celsius annually. Most precipitation occurs as rain, ranging from 12.7 to 63.5 centimeters per year.

Before Euroamerican settlement of the Sacramento Valley, the dominant native vegetation in the Valley consisted of *Nasella pulchra*, or purple needlegrass (Heady 1977). This perennial grass is the distinctive and characteristic species for the Central Valley prairie. Although *N. pulchra* is a quintessential and indicator species for the California prairie, the Valley supported a mosaic of other plant communities. In particular, the numerous waterways bisecting the valley supported many riparian species. Common riparian species are willow (*Salix* sp.), buttonbush (*Cephalanthus occidentalis*), California sycamore (*Platanus racemosa*), and Fremont's cottonwood (*Populus fremontii*).

Specifically, the underlying geologic material of the APE consists of Late Holocene alluvial fan deposits (Meyer and Rosenthal 2008:Figure 47). Prior to historic-period and modern development activities, soils in the APE consisted of San Joaquin series (brown) fine sandy loam (USDA 2013). These soils can extend to up to 60 inches below surface, and were deposited in the area by Late Holocene alluvial activities. However, historic-period and modern development has included importation of fill materials and has also highly disturbed the native soil within the APE. The APE is completely flat and sits at an elevation of approximately 50ft above mean sea level (USGS 1992). The nearest natural drainages to the APE are Magpie Creek (0.33 miles [mi] south) and Dry Creek (0.75mi northwest). Current ground conditions in the APE consist of an existing paved road (Vinci Avenue), concrete curbs and sidewalks, the Bridge, and heavily landscaped areas.

Cultural Setting

Prehistory

Although the Sacramento Valley may have been inhabited by humans as early as 10,000 years ago, the evidence for early human occupation is likely buried by deep alluvial sediments that accumulated rapidly during the late Holocene Epoch. Although rare, archaeological remains of this early period allegedly have been identified in and around the Central Valley. Johnson (1967) presents evidence for some use of the Mokelumne River area, under what is now Camanche Reservoir, during the late Pleistocene Epoch. These archaeological materials and similar materials in the region have been termed the Farmington Complex. Recent work in the vicinity of Camanche Reservoir, however, calls into question whether Farmington Complex exceeds an age of 10000 BP (Rosenthal et al. 2007:151).

Preliminary results from Tremaine & Associates' recent excavations at Sacramento City Hall (Sacramento City Hall overlies the Nisenan village of *Sacum'ne* [CA-SAC-38]) reveal the earliest confirmed habitation of the immediate Sacramento vicinity. Obsidian hydration readings on artifacts may represent use of the site from 8000-3000 BP. Tremaine & Associates also ran three radiocarbon assays, which yielded conventional dates of 5870, 6690, and 6700 BP. The radiocarbon assays were taken between 3 and 3.5 meters (m) below ground surface (Tremaine 2008:99–101).

Later periods of prehistory are better understood because of their more abundant representation in the archaeological record. Fredrickson (1973) identified three general patterns of cultural

manifestations for the period between 4500 BP and 3500 BP: the Windmill, Berkeley, and Augustine Patterns. The Windmill Pattern (4500 BP–3000 BP) shows evidence of a mixed economy consisting of the generalized hunting of game, fishing, and use of wild plant foods. Settlement strategies during the Windmill period reflect seasonal occupation of valleys during the winter and of the foothills during the summer (Moratto 1984). Cultural changes are manifested in the Berkeley Pattern (3500 BP–2500 BP). Technological changes in groundstone from handstones and milling slabs to the mortar and pestle indicate a greater dependence on acorns, and the presence of a wide variety of projectile points and atlatls indicates hunting was still an important activity (Fredrickson 1973). The Berkeley Pattern was superseded by the Augustine Pattern around 1450 BP, and reflects a change in subsistence and land use patterns similar to those of the ethnographically known people of the proto-historic era. This pattern exhibits a great elaboration of ceremonial and social organization, including the development of social stratification. Elaborate exchange systems, further reliance on acorns, and a wide variety of artifacts (flanged tubular smoking pipes, harpoons, clamshell disc beads, and an especially elaborate baked clay industry, which included figurines and pottery vessels called Cosumnes Brownware) are associated with the Augustine Pattern. Increased village sedentism, population growth, and an incipient monetary economy are also hallmarks of this pattern (Moratto 1984).

Ethnography

The APE also is located within the lands occupied and used by the Nisenan, or Southern Maidu. The language of the Nisenan, which includes several dialects, is classified in the Maiduan family of the Penutian linguistic stock (Kroeber 1925; Shipley 1978). The western boundary of Nisenan territory was the western bank of the Sacramento River. The eastern boundary was “the line in the Sierra Nevada mountains where the snow lay on the ground all winter” (Littlejohn 1928).

Nisenan settlement locations depended primarily on elevation, exposure, and proximity to water and other resources. Permanent villages usually were located on low rises along major watercourses. Village size ranged from three houses to 40 or 50. Houses were domed structures covered with earth and tule or grass and measured 3.0 to 4.6m (9.8 to 15ft) in diameter. Brush shelters were used in the summer and at temporary camps during food-gathering rounds. Larger villages often had semisubterranean dance houses that were covered in earth and tule or brush and had a central smoke hole at the top and an east-facing entrance. Another common village structure was a granary used for storing acorns (Wilson and Towne 1978).

The Nisenan occupied permanent settlements from which specific task groups set out to harvest the seasonal bounty of flora and fauna that the rich valley environment provided. The Valley Nisenan economy involved riparian resources, in contrast to the Hill Nisenan, whose resource base consisted primarily of acorn and game procurement. The only domestic plant was native tobacco (*Nicotiana* sp.), but many wild species were closely husbanded. The acorn crop from the blue oak (*Quercus douglasii*) and black oak (*Q. kelloggii*) was so carefully managed that its management served as the equivalent of agriculture. Acorns could be stored in anticipation of winter shortfalls in resource abundance. Deer, rabbit, and salmon were the chief sources of animal protein in the aboriginal diet, but many other insect and animal species were taken when available.

Religion played an important role in Nisenan life. The Nisenan believe that all natural objects were endowed with supernatural powers. Two kinds of shamans existed: curing shamans and religious shamans. Curing shamans had limited contact with the spirit world and diagnosed and healed illnesses. Religious shamans gained control over the spirits through dreams and esoteric experiences (Wilson and Towne 1978). The usual mode of burial was cremation (Faye 1923).

The gold rush of 1849 had a devastating effect on the Valley Nisenan—the flood of miners that came to the area in search of gold brought diseases with them that decimated the Nisenan population. Those who survived were subjected to violence and prejudice at the hands of the miners, and the Nisenan eventually were pushed out of their ancestral territory. Although this contact with settlers had a profound negative impact on the Nisenan population through disease and violent actions, the Nisenan people survive and maintain strong communities and action-oriented organizations.

History

Early Exploration and Settlement

The first European to likely enter the Sacramento County region was the Spanish explorer, Father Narisco Duran, who was seeking suitable sites for missions in California's interior. In 1772, 1793, and 1808, other Spanish explorers visited various regions along the Sacramento River, but did not enter the Sacramento County region proper. Father Narisco Duran, along with Luis Arguello and Father Romon Abella, finally passed through the area in 1817. A decade later, the first European - American, Jedediah Strong Smith, entered the region. Two years later, Smith opened the Sacramento Trail, which gave hunters and trappers from as far north as Vancouver access to the area (Douglas et al. 1990: 285-286).

In 1839, John A. Sutter received a grant of eleven leagues from the Mexican government on which he established a frontier outpost, naming it New Helvetia. Sutter's outpost became a trading post, a military fort, and a frontier oasis. The only settled area in this part of California, New Helvetia became the area's social, economic and political nucleus and the forerunner to the City. The signing of the Treaty of Guadalupe Hidalgo in 1848, as well as the onset of the Gold Rush, spelled the end of New Helvetia. Fortune-seeking gold miners entered the Sacramento region in large numbers, overrunning Sutter's property in their quest for gold. The influx of miners led to the development of the City, which began as two log buildings outside Sutter's Fort, but ballooned into a city with a constant population of 2,000 by October of 1849. In 1850, the city was incorporated, and, in 1854, due to its proximity to the gold fields, the California Legislature officially made it the California State Capitol (Gudde 1969: 221; Douglas et al. 1990: 286-287, 291-292).

Twentieth Century History

The APE is located within Rancho Del Paso (Rancho), which has the distinction of being one of the few Mexican land grants held intact into the 20th century. Although the land was originally granted to the Grimes Brothers, the first settler on the Rancho land was lessee John Sinclair, who established a residence near the American River. In August 1849, the Grimes sold the Rancho to Samuel Norris, to whom the United States government granted a patent for the land in 1858. After using the land for a variety of agricultural and ranching purposes for more than a decade, Norris sold the Rancho in 1862 to James Ben Ali Haggin and Lloyd Tevis. Haggin and Tevis attempted unsuccessfully to subdivide the land, consequently it was under almost constant litigation for nearly 20 years. Finally in 1881, Haggin decided to use the Rancho lands to raise horses. In time, it became one of the most famous horse breeding establishments in the United States (McGowan 1961:182, 263-264; Perez 1996).

In 1905, Haggin decided to sell his stock and dispose of the Rancho land; Haggin needed five years to accomplish the final disposition, however. In January 1910, the Sacramento Valley Colonization Company, a subsidiary of the United States Land Company of Chicago, purchased the Rancho. The company then announced plans to subdivide the land and establish two towns, one near the Southern Pacific station at Walerga and the other near Dry Creek station of the Sacramento Northern Electric Railway (the Sacramento Northern had laid out the town of Elverta north of Dry Creek station two years earlier). The company first gave the City the option to purchase lands for a

park. In 1911, Sacramento selected 900 acres near Arcade Creek and developed the land as the Del Paso Park and Haggin Oaks Golf Course (McGowan 1961: 183; Sacramento County Department of Environmental Review and Assessment 1997:341).

By 1914, the North Sacramento Land Company had purchased a large tract of the former Rancho lands and established the City of North Sacramento. The city incorporated in 1924 and was for some time the most successful settlement in the region—the land company sold town lots until about 1933. The City of North Sacramento was generally laid out on a grid with the northern boundary being North Avenue (Gudde 1969:87; McGowan 1961:187). In 1935, as a result of the efforts of Arthur Dudley, manager of the Sacramento Chamber of Commerce, Congress appropriated \$7,000,000 to establish an Army Air Corps supply depot on portions of the former Rancho lands near Sacramento. The Sacramento Air Depot was officially dedicated in April 1938. The following year, the name was changed to McClellan Field in honor of an Air Corps major who had died during a test flight in Ohio. During World War II, McClellan Field played a significant role in repairing aircraft and supplying the fighting force. By the end of the war, the base was one of the largest employers in the valley (Burns 2001:108).

The City of North Sacramento grew during the war because of its proximity to McClellan Air Force Base (renamed after the establishment of a separate air force in 1947) and the need for defense-related workers. The community eventually became established as the working class community that it now remains. In 1965, Sacramento officially annexed North Sacramento and Del Paso Heights (Burns 2001:117; Lee 1973). Because there were no established building or zoning ordinances prior to annexation in 1965, much of the development and construction in Del Paso Heights area followed an almost haphazard pattern. By the late-1960s many community residents struggled with poverty. Infrastructure was described as “dilapidated” in a community plan written by the Sacramento City Planning Commission; the area was also described as lacking adequate drainage ditches, curbs, gutters and sidewalks (Sacramento Union 1967). By 1970, a Redevelopment Project Area for Del Paso Heights was adopted by the City. Since this time the City has invested millions of dollars in public infrastructure in efforts to improve the community for its residents (Sacramento Housing and Redeployment Agency ca. 2009:1).

Magpie Creek Diversion Channel

The MCDC was constructed between 1955 and 1956, as part of a \$1,100,000 flood control and reclamation project jointly funded by the California State Reclamation Board and the USACE. The goal of the project was to open up approximately 9,000 acres of land north of Sacramento for residential developments (Johnson Height-East Del Paso Heights). The project involved construction of 11mi of new levees that bordered the east side of the Natomas Canal, Arcade Creek, and the north side of the American River at its confluence with the canal, and the subject MCDC. The project also involved constructing seven pumping plants. The purpose of the MCDC was to funnel water from the Magpie Creek and its drainage area, north of McClellan Air Force Base into the Natomas Canal (Miller 1955: Sacramento Bee, page 25, column 2).

In 1970, the Vinci Ave. Bridge (Caltrans Bridge Number 24C0224) was constructed to cross the channel. Currently, the Bridge and Vinci Ave. is closed off from public use. Beginning in 2006, the Sacramento Area Flood Control Agency (SAFCA) initiated a project to enhance the MCDC which included making alterations to the bank and stabilize the slope of the channel, relocate the stream channel away from the levee, and build a more natural channel that incorporated meander, riffle, and pool features. Other elements of the project included efforts to reduce the low flow channel width and depth, and build a low floodplain shelf. Lastly, the project which covered approximately

5.1 acres, re-planted new vegetation including native trees, shrubs, and herbaceous types along the new channel banks (SAFCA 2010:3-4).

Field Methodology

On April 8, 2014, ICF Archaeologist Robin D. Hoffman conducted an intensive archaeological pedestrian survey of the original (2013) APE. On February 2, 2015, Hoffman conducted an intensive archaeological pedestrian survey of the revised (2014) APE. Hoffman examined all portions of the APE, inspecting the ground surface for evidence of cultural deposits and indications of subsurface deposits. A survey-grade (sub-meter) handheld GPS unit was used to verify the APE location, and photographs were taken of the APE to document ground conditions.

On May 16, 2014, an ICF architectural historian performed an intensive-level field survey of the original (2013) APE. During the survey, the architectural historian conducted an inventory of all architectural resources (i.e., buildings, structures and/or linear features) 45 years or older within the APE. One architectural resource, a segment of the MCDC, was identified within the original APE. The resource was visually inspected, photographed, and documented in field notes. The tasks carried out to complete the inventory and evaluation of architectural resources within the APE consisted of: pre-field research and literature review, a field survey, historical research on the identified resources and region, and evaluation of the resource for their potential to qualify for listing in the NRHP and CRHR.

Archaeological Sensitivity Analysis

An archaeological sensitivity analysis was conducted for this study using the following variables:

- Results of the archaeological survey conducted in this study;
- Current conditions in the APE;
- Previous geoarchaeological studies that included the APE;
- APE's proximity to natural waterbodies;
- Known cultural resources in the vicinity of the APE; and,
- Ethnographic place names in the vicinity of the APE.

Based on the analysis, it appears that, for the APE, the potential for intact surficial archaeological deposits is low for buried archaeological deposits.

During the archaeological survey conducted for the current study, all portions of the APE were examined and no archaeological material was observed. The entire APE has experienced a large degree of previous ground disturbance from historic-period and modern development activities. Considering these factors, the potential for surficial archaeological deposits in the APE is low.

Kroeber (1925) shows no documented ethnographic places/villages in the vicinity of the APE. The nearest natural drainages to the APE are Magpie Creek (0.33mi south) and Dry Creek (0.75mi northwest). Though the APE is not in the immediate vicinity to these natural waterbodies, their courses may have varied to some degree during the Holocene and the APE may have been situated somewhat closer to one or both of them. Meyer and Rosenthal (2008) suggest that areas of Late Holocene deposits, particularly fan deposits, have an overall high potential for buried archaeological deposits, with a high potential for Middle Archaic sites and moderate potential for sites predating the Middle Archaic (Meyer and Rosenthal 2008:Tables 29 and 30). Meyer and Rosenthal emphasize that areas with moderate through very high potential for buried archaeological deposits should receive additional consideration during Project planning, including potentially conducting subsurface survey/inspection.

Engineering drawings from previous construction projects (presented in Appendix E of this document) show that significant ground disturbance has occurred to approximately 10ft deep for installation of various utilities (e.g., storm drains, sewage pipes, electrical conduit) and street improvements (e.g., paving, curbs, sidewalks) in the western portion of the APE, particularly on the north side of Vinci Ave. Project design calls for ground disturbance of up to 2ft deep for new roadway and shoulder widening pavement construction—the proposed locations of these activities may have already been previously disturbed up to this depth by previous construction activities. Project design calls for placement of drainage facilities that will involve ground disturbance of up to 6ft deep. These activities may include disturbance of intact native soil. Though the APE could be considered to have high potential for buried archaeological deposits based on the analyses above, proposed Project activities with potential to disturb intact native soil are minimal. Due to the small scope of such ground-disturbing activities, this analysis concludes that the potential for buried archaeological deposits in the APE is low.

Native American Coordination

ICF Archaeologist Robin D. Hoffman contacted the NAHC by email (with an attached request and Project APE map) on March 25, 2014 to identify any areas of concern within the original APE that may be listed in the NAHC's Sacred Lands File (SLF), and to provide a list of Native American representatives who may have interest in the Project. The NAHC replied on April 29, 2014, stating that the SLF contains no record of any cultural resources within or near the APE. On February 5, 2015, Hoffman contacted the NAHC by email (with an attached request and revised [2013] Project APE map) to identify any areas of concern within the revised (2014) APE that may be listed in the SLF, and to provide a list of Native American representatives who may have interest in the Project. The NAHC replied by fax on February 13, 2015, stating that SLF contained no information regarding the presence of Native American cultural resources within the APE. The response also contained a list of 13 Native American representatives who may be interested in the Project. On February 16, 2015, Hoffman sent letters to each of these representatives with information on the Project, including its location and proposed elements, and requesting that the representatives notify ICF if they have concerns regarding the Project. To date, ICF has received no response from these letters, and will make follow-up phone calls to the 13 representatives in mid-March 2015. Documentation of Native American coordination to date can be found in Appendix D of this report. The final version of this report will include any additional correspondence received by ICF between the submittal of this draft and submittal of the final report.

Other Interested Party Coordination

On June 16, 2014, ICF sent one letter to the Sacramento County Historical Society. The letter briefly described the original Project and requested information about cultural resources near the original APE. As of the time of this report, no response has been received. Documentation on coordination with other interested parties can be found in Appendix D of this report. The final version of this report will include any additional correspondence received by ICF between the submittal of this draft and submittal of the final report.

Findings

ICF identified *no archaeological resources in the APE* and *one architectural resource of at least 45 years of age (CA-SAC-519H) within the APE*. This resource is a segment of the MCD. As part of this study, ICF evaluated the resource for NRHP- and CRHR-eligibility.

Virtually all of the APE has been previously disturbed, evidenced by dirt roads, landscaped berms, commercial buildings, and parking lots present. In the eastern portion of the APE, east of the Bridge, are the remnants of the original dirt/gravel Bridge approach, bordered to the south by a small east-west ditch extending from the eastern edge of the APE to the drainage over which the Bridge passes. To the west of the Bridge is a paved portion of Vinci Ave., bounded on both sides by, alternately, disturbed road shoulders, paved sidewalks, paved curbs, paved driveways, and landscaped areas of residential houses and commercial buildings. Outside of the paved areas and Bridge road surface ground visibility was limited to approximately 25 percent due to dense low grasses and forbs. Figures 4 and 5, below, illustrate ground conditions within the APE at the time of the surveys. No archaeological resources were observed during the pedestrian surveys.

Figure 4. Overview of APE from East End, View West



Figure 5. Overview of APE from West End, View East



CA-SAC-519H – Magpie Creek Diversion Channel

The subject segment of the MCDC crosses under the Vinci Ave. Bridge (Bridge). The resource's location within the APE is highlighted as Reference #1 in Figure 3, Appendix A. The MCDC was constructed between 1955 and 1956 by the USACE and the State of California Reclamation Board. Vinci Ave. Bridge (Caltrans Bridge No. 24C0224) was constructed to cross the MCDC in 1970. The subject segment of the MCDC is approximately 100ft in length, and 50ft wide. The slope of this section of the MCDC walls are roughly 12.5ft deep and the bottom of the channel is approximately 25ft across. The water in the channel was roughly 1-3ft deep at the time of survey. Overall, the MCDC segment is earthen lined and covered with riparian vegetation. A large concrete gate is located approximately 30ft north of the Bridge, on the east side of the MCDC. The MCDC segment is located in an area of Sacramento County that has been developed for light industrial and residential uses. Photographs of the MCDC are presented in Figures 6 and 7, below.

Recommendation of Eligibility

CA-SAC-519H – Magpie Creek Diversion Channel

Significance Statement

This linear resource was constructed between 1955 and 1956 by the USACE and the State of California Reclamation Board (RB). The MCDC was constructed by the USACE to provide flood control to the region by diverting water flows away from the lower portion of Magpie Creek into the MCDC (SAFCA 2009:3). The subject segment of the MCDC does not appear eligible for listing in the NRHP or the CRHR. It should be noted that although recordation of the entire MCDC was beyond the scope of this Project, this evaluation would likely apply to the entire resource.

Figure 6. MCDC from South Side of Vinci Avenue Bridge, View South



Figure 7. MCDC From North Side of Vinci Avenue Bridge, View North



Water-conveyance systems and flood-control mechanisms, such as diversion channels and levees, are a property type commonly found in Sacramento County and throughout California. The introduction and expansion of these facilities was integral to the successful development and settlement of the Sacramento Valley. It is also important to consider that these systems are generally made up of the same types of engineering components: ditches, canal, levees, control gates, and other associated functional features. Infrastructure resources such as the MCDC are usually considered significant under NRHP Criterion A and CRHR Criterion 1 for their association with

trends and/or events that have made a significant contribution to the broad patterns of our history, particularly in regional agricultural, local economic, or residential development. Additionally, usually the earliest of these systems are those found to be significant. While later systems may have influenced settlement, growth of local economies, and agricultural ventures, this is too common of an association to merit a conclusion of historical significance under Criterion A/1 within the context of water-conveyance systems and flood-control mechanisms. At some point in the past, all forms of historic-period infrastructure were associated locally or regionally with growth or economic development, actual or intended. It is often exceedingly difficult to prove whether historic-period infrastructure associated with recognizable growth actually *caused* the growth or *accommodated* the growth.

Under NRHP Criterion A and CRHR Criterion 1, a significant resource could be an early main levee or flood control system of its kind in the region, or be an essential component of a water-conveyance system that transformed, settlement, local agricultural, or industrial development in the area. Essentially, the subject segment of the MCDC, constructed between 1955 and 1956, represents a mid-20th Century enlargement to the existing Sacramento County flood control system and therefore represents typical patterns of growth and community expansion. As such it is not recommended as NRHP- or CRHR-eligible under Criterion A and 1, respectively.

Although NRHP Criterion A and CRHR Criterion 1 are the criteria that are most often applied to this property type, there is the potential for such a resource to be found eligible for association with the lives of significant persons under NRHP Criterion B and CRHR Criterion 2; or for eligibility under Criterion C and Criterion 3 if they embody distinctive characteristics of this property type. According to the National Register Bulletin 15, *How to Apply the National Register Criteria for Evaluation*, Criterion B “is generally restricted to those properties that illustrate a person’s important achievements” (U.S. Department of the Interior 1995:14). Examples of property types that have proven association with significant individuals under this Criterion include “the homes of an important merchant or labor leader, the studio of a significant artist, and the business headquarters of an important industrialist” (U.S. Department of the Interior 1995:14). To be found eligible under Criterion B/2, the property has to be directly tied to the important person and the place where the individual conducted or produced the work for which he or she is known. Water-conveyance systems and flood control structures were constructed by companies and/or individuals in order to irrigate land holdings for agricultural pursuits or to protect land and property from flooding. Therefore the relevant association would be with their land holdings rather than the water-conveyance system that enabled them to successfully settle in the area or develop their agricultural business. Additionally, this system (the MCDC), having been constructed by the USACE and California State Reclamation Board, is the collective efforts of many individuals rather than the work of any single individual. Thus, the MCDC ultimately lacks an association with any prominent individual and does not appear to be eligible for listing in the NRHP under Criterion B or the CRHR under Criterion 2.

Regarding NRHP Criterion C and CRHR Criterion 3, overall, the MCDC is not innovative in its design, form, or function, nor is it known to be associated with the work of a master engineer. Additionally, diversion channels are commonly found throughout California in regions where flood control infrastructure is a necessity to protect population centers have been established and subsequently expanded. Consequently, such systems are not likely to display distinctive characteristics of a type, period, or method of construction and, therefore, do not appear to meet NRHP Criterion C or CRHR Criterion 3.

Lastly, the MCDC is a property type that does not appear to have yielded, or is likely to yield, information important in prehistory or history. Therefore, the resources does not appear to be eligible under NRHP Criterion D or CRHR Criterion 4.

Furthermore, alternations to the segment including the addition of the Vinci Ave. Bridge in 1970 and recent alternations to stabilize the overall MCDC have decreased the resource's level of historic integrity. Overall, lacking necessary associations to meet NRHP and CRHR Criteria, and historic integrity, the MCDC does not appear eligible for listing in the NRHP or CRHR. Additionally, the MCDC is not a significant resource for the purposes of CEQA as defined in CEQA § 15064.5.

For more detailed information on these resources see the site record update completed by ICF, found in Appendix C of this document.

Recommendation of Effect of the Undertaking on Cultural Resources

The only cultural resource 45 years of age or older identified in the APE during this study is a segment of the MCDC, a flood control/water conveyance structure. This study evaluated the resource's significance and concludes that this resource does not appear to meet the criteria for listing in the NRHP or CRHR, recommending it not eligible for the NRHP and CRHR. As such no historic properties, for NHPA purposes, or historical resources, for CEQA purposes, were identified within the APE. Therefore, ICF does not foresee that the Project will result in any impacts to NRHP- or CRHR-eligible resources. ICF does not recommend further study or mitigation for cultural resources for the Project.

Based on this study, ICF anticipates a Finding of ***No Historic Properties Affected*** for the Project.

Though no NRHP- or CRHR-eligible resources were identified during this study, there is always the possibility that unrecorded resources could be encountered during Project ground-disturbing activities. If such resources are encountered, inadvertent damage to them would be considered an adverse effect if the discovered resource was determined to be eligible for listing in the NRHP or CRHR. The following section presents protocol in the event that unanticipated archaeological sites and/or human remains are encountered during Project implementation.

Inadvertent Discovery Protocol

Unanticipated Archaeological Resources

If there is an unanticipated discovery of archaeological deposits or remains during Project implementation, construction crews shall stop all work within 100ft of the discovery until a qualified archaeologist can assess the discovery and provide recommendations. Such archaeological deposits could include buried historic features, such as artifact-filled privies, wells, and refuse pits, and artifact deposits, concentrations of adobe, stone, or concrete walls or foundations, and concentrations of ceramic, glass, or metal materials. Native American archaeological materials could include obsidian and chert flaked stone tools (such as projectile points and knives), midden (darken soil created culturally from use and containing heat impacted rock, artifacts, animal bones, or shellfish remains), and/or groundstone implements (such as mortars and pestles).

Encountering Human Remains

While the possibility is low, there remains a chance of encountering human remains either in association with prehistoric occupation sites, or separately. The HSC (§ 7050.5) states that it is a misdemeanor to knowingly disturb a human burial, and PRC § 5097.99 defines the obtaining or possession of Native American remains or grave goods to be a felony. If human remains are

encountered as a result of construction activities, any work in the vicinity shall stop, and the Sacramento County Coroner (Coroner) shall be contacted immediately. In addition, a qualified archaeologist shall be contacted immediately to evaluate the discovery. If the human remains are Native American in origin, then the Coroner must notify the NAHC within 24 hours of this identification.

References

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Professional Qualifications

Kathryn Haley, MA

ICF Architectural Historian, Kathryn Haley, has more than 10 years of experience in cultural resources management and has worked on a wide variety of projects involving historic research, field inventory, and site assessment conducted for compliance with Section 106, NEPA, and CEQA. With an M.A. in Public History, she meets the Secretary of the Interior's standards for historian and architectural historian. Specifically, Kathryn specializes in managing large-scale surveys of architectural resources and historic district evaluations. Over the course of her career with ICF, Kathryn has been instrumental in identifying and updating historic districts in various project study areas throughout California and, in doing so, preparing the appropriate recordation.

Robin D. Hoffman, MA, RPA

ICF Archaeologist Robin D. Hoffman is a Registered Professional Archaeologist (RPA) with more than a decade of experience in environmental consulting as a project manager, archaeologist, cultural anthropologist, historian, GIS specialist, and Latin Americanist/Iberianist, having worked throughout California, Oregon, Washington, Idaho, Utah, Colorado, Montana, Oklahoma, Louisiana, Mississippi, Alabama, Arkansas, Florida, Brazil, and Senegal. Hoffman holds a BA in Anthropology from Central Washington University (2002), and an MA in Latin American and Iberian Studies from the University of California, Santa Barbara (2010). Projects on which Hoffman has worked have included coordination with: NPS (including ACHP); US military; USACE; Caltrans; WSDOT; California DCR; many county agencies throughout California, Oregon, and Washington States; USDFW; DOS; DOE; BOEM, and the STB, among others. Hoffman's projects have included compliance for: NEPA, CEQA, SEPA (WA), Sections 106 and 110 of NHPA, Section 4(f) of the US DOTA, USACE 404 and 408 Permits, FERC relicensing, and CERCLA, among others.

Hoffman is qualified at a level equivalent to Caltrans PQS Co-Principal Investigator-Prehistoric Archaeology and also meets the Secretary of the Interior's Standards for Archeology.

Appendix A Maps



K:\Projects - 1\City of Sacramento\00125 - 13 - VinciBridge\mapdoc\Cultural\2015 - report\Fig1 - ProjLoc.mxd 2/5/2015

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
 Content may not reflect National Geographic's current map policy. Sources:



Figure 1 - Project Location
Vinci Avenue Bridge and Improvements Project
City of Sacramento, California

Path: K:\Projects_1\City of Sacramento\00125_13_VinciBridge\mapdoc\Cultural\2015_report\Fig2_ProjVic.mxd; User: 26611; Date: 2/5/2015

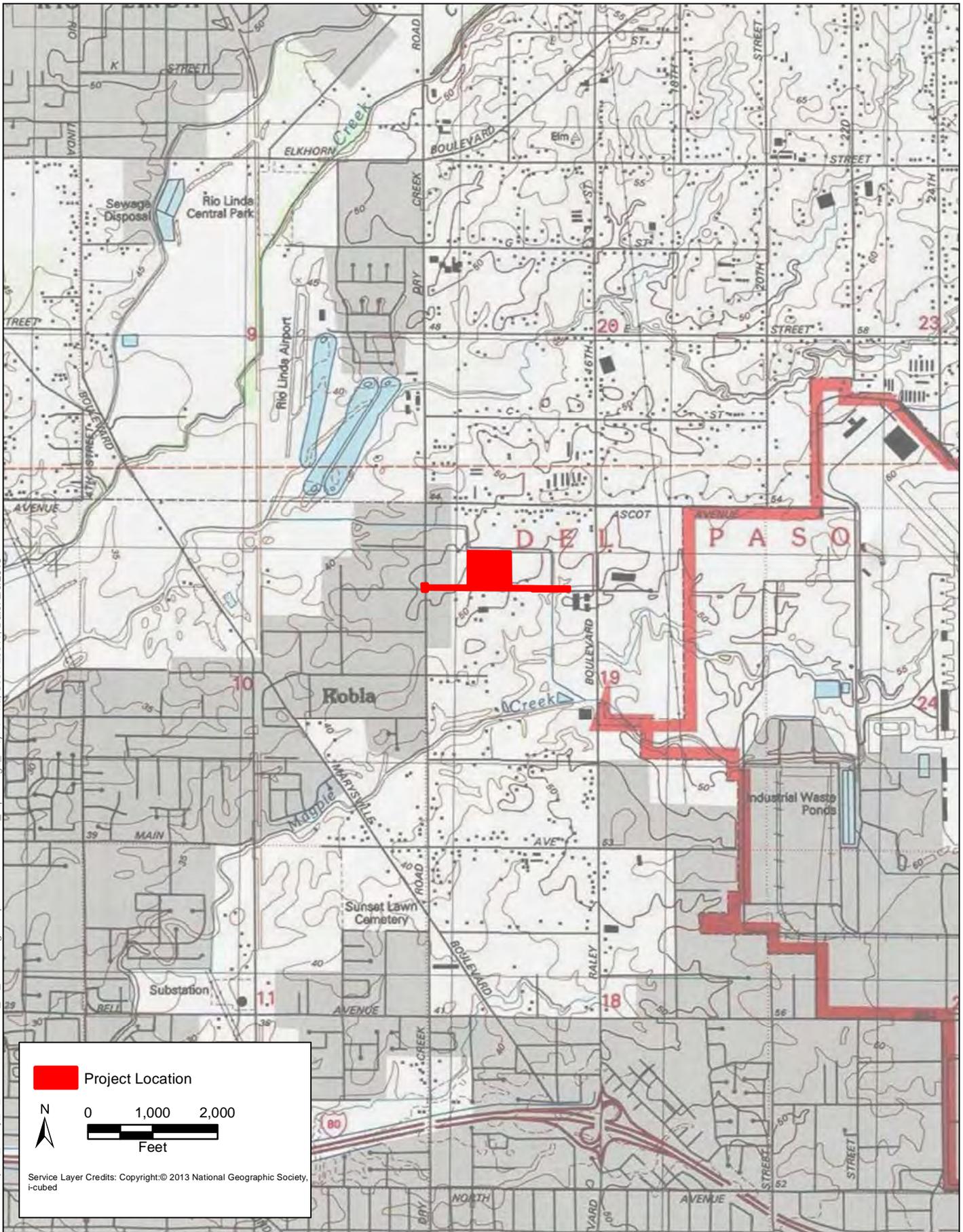


Figure 2 - Project Vicinity
Vinci Avenue Bridge and Improvements Project
City of Sacramento, California



Path: K:\Projects_1\City_of_Sacramento\00125_13_VinciBridge\mapdoc\Cultural\2015_report\Fig3_APE.mxd; User: 26611; Date: 2/5/2015

Area of Potential Effects
 Project Footprint
 Staging Area

N
 0 100 200
 Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
 Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

**Figure 3 - Area of Potential Effects
Vinci Avenue Bridge and Improvements Project
City of Sacramento, California**

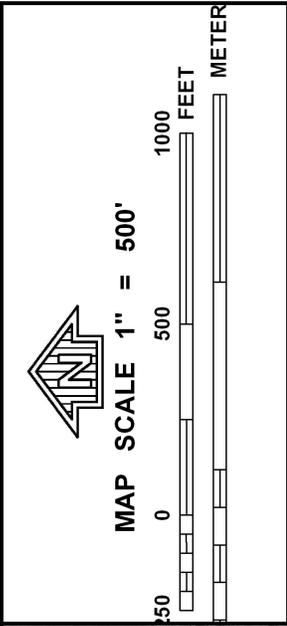


Appendix B

CHRIS Records Search Results

CONFIDENTIAL

APPENDIX F



NFIP NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP
SACRAMENTO COUNTY,
CALIFORNIA
AND INCORPORATED AREAS

PANEL 0066H

PANEL 66 OF 705
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SACRAMENTO, CITY OF	060266	0066	H
SACRAMENTO COUNTY	060262	0066	H

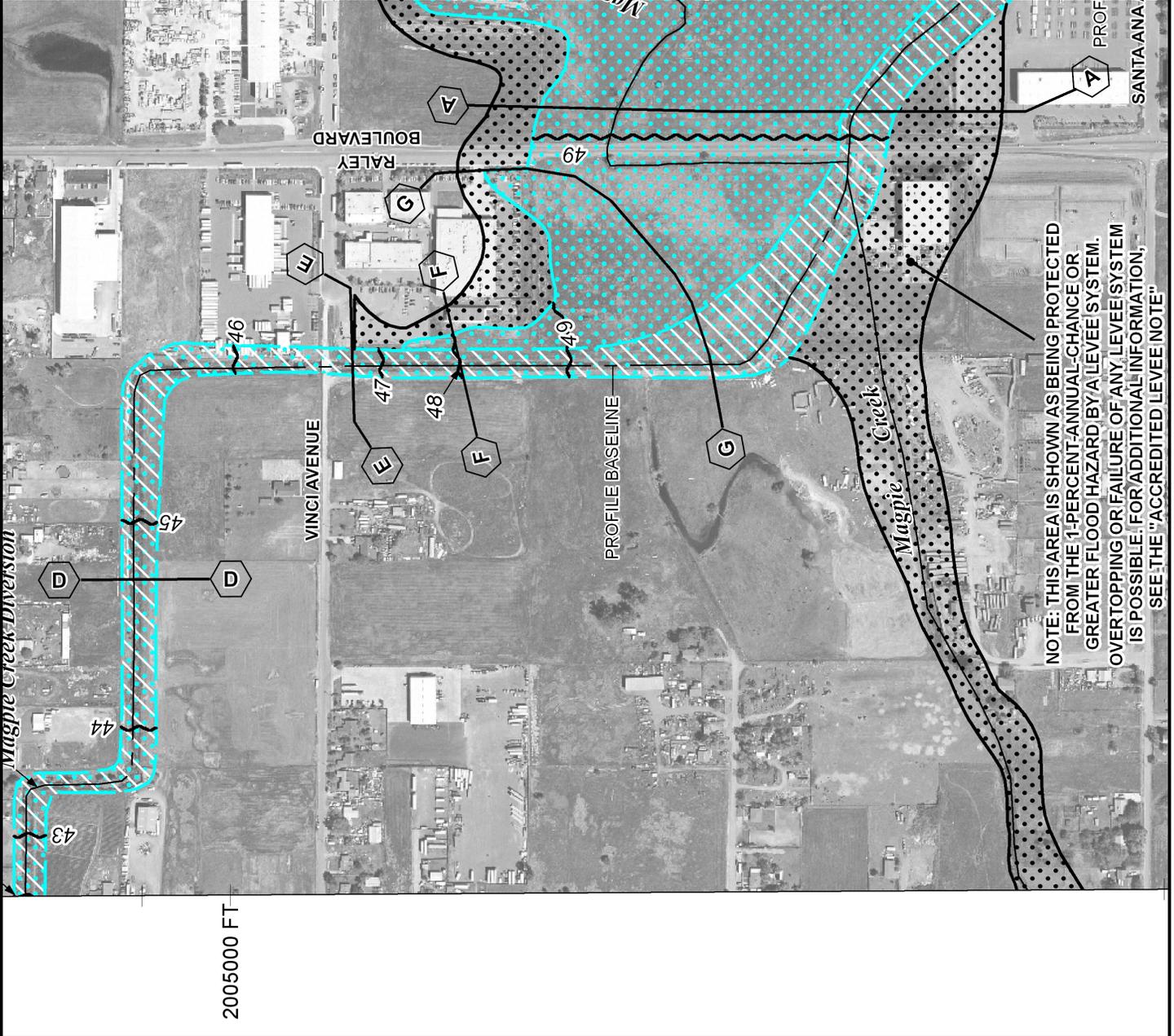
Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
06067C0066H

EFFECTIVE DATE
AUGUST 16, 2012

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps, check the FEMA Flood Map Store at www.msc.fema.gov



APPENDIX G

Vinci Avenue Bridge Improvements Project (T15125500) Mitigation Monitoring Plan

In January 1989, Assembly Bill 3180 went into effect requiring the City to monitor all mitigation measures applicable to this project and included in the Mitigated Negative Declaration. For this project, mitigation reporting will be performed by the City of Sacramento in accordance with the monitoring and reporting program developed by the City to implement AB 3180.

This Mitigation Monitoring Plan is being prepared for the Community Development Department, Environmental Planning Services, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Guidelines, State Public Resources Code 21081.

Project Name (number): Vinci Avenue Bridge Improvements Project (T15125500)

Project Location: The Vinci Bridge Replacement project is located in the City of Sacramento, California. The existing bridge crosses Magpie Creek Diversion Channel approximately 0.35 mile east of the intersection of Vinci Avenue and Dry Creek Road

Project Description: The existing Vinci Avenue bridge (Bridge #24C0224) is a two-lane, two-span, reinforced concrete-slab bridge located approximately 0.35 miles east of the intersection of Vinci Avenue and Dry Creek Road. Constructed in 1970, the bridge carries Vinci Avenue over Magpie Creek diversion channel and ties back into Vinci Avenue through approximately 182 feet of non-native grassland habitat east of the bridge.

Improving the Vinci Avenue bridge will do the following:

- Increase the height of the bridge railing to meet City standards;
- Remove trucks from residential roads by connecting both sides of the bridge to Vinci Avenue therefore providing better access to Raley Boulevard and Interstate 80;
- Provide pedestrian facilities by widening shoulders on Vinci Avenue.

The Vinci Avenue bridge currently includes 30-inch metal beam guard rail barriers which do not meet the City standard safety recommendation of a minimum height of 42-inches. The proposed project will include installation of 42-inch concrete barriers. Additionally, since the bridge contains no shoulders, the project will also incorporate a 6-foot wide sidewalk on the south side of the bridge and a 1.66-foot wide concrete strip on the north side for pedestrian and maintenance purposes. Roadway improvements will also take place along Vinci Avenue. The proposed project will include the rehabilitation and extension of approximately 0.40 miles of paved road and will incorporate 5-foot widened shoulders.

**MITIGATION MONITORING PLAN CHECKLIST FOR THE
 VINCI AVENUE BRIDGE IMPROVEMENTS PROJECT (T15125500)**

Mitigation Measure	Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
			Initials	Date
<p>AIR QUALITY</p> <p>AQ-1: Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.</p>	During Construction	City of Sacramento Department of Public Works and Contractor		
<p>AQ-2: Sacramento Metropolitan Air Quality Management District's Rule 403 - Fugitive Dust would be followed. The general requirements of Rule 403 are:</p> <p>301 Limitations: A person shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:</p> <p>301.1 Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land.</p> <p>301.2 Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;</p> <p>301.3 Other means approved by the Air Pollution Control Officer.</p> <p>Sacramento City Code Title 15 BUILDINGS AND CONSTRUCTION*</p> <p>15.40.050 Control of dust and mud Any person who has been issued a permit for any work covered by this code shall take reasonable precautions to prevent and control the movement of dust created by work activities to adjoining public or private property. Such dust shall be immediately settled by wetting the same. Work activities shall be stopped during periods of high winds that may carry dust from the job site before it can be settled by wetting.</p>	During Construction	City of Sacramento Department of Public Works and Contractor		

Mitigation Measure	Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
			Initials	Date
<p>The permittee shall be responsible for maintaining clean public streets, sidewalks and alleys in the immediate vicinity of the job site during and after the period of work activity. The permittee shall remove all mud and dust from any public property which was deposited there by any activity related to the work. In order to prevent mud and other material from entering any public sewer, the permittee shall properly pond any affected gutter to permit such material to settle and shall remove such material from public property. This procedure shall be in accordance with the requirements and policies of the city water and sewer division. The permittee shall obtain any necessary permits for water from the manager of said division.</p> <p>15.44.170 Dust control. All dust resulting from wrecking or demolition operations shall be immediately settled by wetting the same with water of sufficient quantity to prevent the dust from leaving the site of the demolition or wrecking project. Demolition shall be stopped during periods of high winds that carry the dust from the site before it can be settled by wetting. The permittee shall be responsible for maintaining clean public streets during such operation. The permittee must obtain the necessary permits for water from the manager of the division of water and sewers and pay for such permits and for water used. The permittee shall wash off public property to remove all silt and dust. In order to prevent such material from entering any public sewer, the permittee shall properly pond the gutter in order to permit such material to settle, and it shall be then cleaned up and hauled away. This procedure shall be followed in accordance with the requirements and policies of the water and sewers division.</p>				
<p>AQ-3: Basic Construction Emission Control Practices</p> <p>The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel powered equipment. The California Air Resources Board enforces the idling limitations.</p> <ul style="list-style-type: none"> Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this 	During Construction	City of Sacramento Department of Public Works and Contractor		

Mitigation Measure	Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
			Initials	Date
<p>requirement for workers at the entrances to the site. Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.</p> <ul style="list-style-type: none"> • Maintain all construction equipment in proper working condition according to manufacturer’s specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated. 				
<p>BIOLOGY</p> <p>BIO-1 and 2: If construction is planned to occur during the raptor or bird nesting season (February 15th – September 15th) a preconstruction nesting survey shall be conducted by a qualified biologist within 7 days prior to vegetation removal. Vegetation surveyed for raptors shall include all trees, 10 feet or taller and containing a dbh of 2 inches or greater, and vegetation surveyed for birds shall include all trees, bushes, tall grasses and emergent vegetation. Within 2 weeks of the nesting raptor and bird survey, all vegetation cleared by the biologist shall be removed by the contractor.</p> <p>A minimum 500 foot no-disturbance buffer shall be established around any active raptor nest, and a minimum 100 foot no-disturbance buffer shall be established around any active bird nest, to limit the impacts of construction activities. The contractor shall immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged.</p>	<p>Prior to and during construction –</p> <p>Mitigation measures shall be included in all construction documents for implementation during construction.</p>	<p>City of Sacramento Department of Public Works</p> <p>and</p> <p>Contractor</p>		

Mitigation Measure	Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
			Initials	Date
<p>BIO-3: If construction on the existing bridge is planned to occur during the swallow nesting season, measures shall be taken to avoid impacts to migratory swallows. To protect migratory swallows, unoccupied nests will be removed from the existing bridge structure prior to the nesting season (February 15th – September 15th). During the nesting season, the bridge structure shall be maintained through the active removal of partially constructed nests. Swallows can complete nest construction in approximately 3 days. After a nest is completed, it can no longer be removed until an approved biologist has determined that all birds have fledged and the nest is no longer being used.</p>	<p>Prior to and during construction –</p> <p>Mitigation measures shall be included in all construction documents for implementation during construction.</p>	<p>City of Sacramento Department of Public Works</p> <p>and</p> <p>Contractor</p>		
<p>BIO-4: The Magpie Creek Channel and all associated wetland vegetation shall be marked as Environmentally Sensitive Area (ESA) and either staked or fenced with orange snow fencing to ensure the construction areas will not encroach further than the work limits designated in the environmental permits. During the construction period, a qualified biologist shall inspect the construction limits periodically to ensure sensitive locations remain undisturbed.</p>	<p>During Construction</p>	<p>City of Sacramento Department of Public Works</p> <p>and</p> <p>Contractor</p>		
<p>CULTURAL</p> <p>CR-1: If previously unidentified cultural materials are unearthed during construction, it is Caltrans’ policy to halt work in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.</p>	<p>During Construction</p>	<p>City of Sacramento Department of Public Works</p> <p>and</p> <p>Contractor</p>		
<p>CR-2: Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and</p>	<p>During Construction</p>	<p>City of Sacramento</p>		

Mitigation Measure	Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
			Initials	Date
grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt in that vicinity and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within twenty-four hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.		Department of Public Works and Contractor		

APPENDIX H

Vinci Avenue Bridge Improvements Project (#T15125500)
Draft Initial Study/Mitigated Negative Declaration Comment Letters & Responses

Comment	
1	<p>Commenter: Traci Canfield/Sacramento Regional Transit Email, Received April 23, 2015 4:00 PM</p> <hr/> <p>From: Traci Canfield [mailto:tcanfield@sacrt.com] Sent: Thursday, April 23, 2015 4:00 PM To: Dana Mahaffey Cc: Robert Hendrix Subject: Re: Vinci Bridge Improvements Project</p> <p>Hi Dana - I have a couple questions about this project: - Will construction be shutting down Dry Creek Rd at all? Because we have a bus route on that road and we would want to know what the impacts during construction would be. Will access to the 2 nearby bus stops be impacted? - Also - will improvements be made to the bus stops on that corner? Will sidewalk access connect to them from the intersection? (It would be really great if so). If so, has there been any coordination with our bus stop manager to review plans? Who is the City's project manager for this project?</p> <p>thanks, Traci</p> <p>>>> Dana Mahaffey <DMahaffey@cityofsacramento.org> 4/23/2015 3:18 PM >>> Good Afternoon</p> <p>The City of Sacramento, Community Development Department, Environmental Planning Services has completed the preparation of a draft Mitigated Negative Declaration for the Vinci Ave. Bridge Improvements Project. Attached is the Notice of Availability/Intent to adopt the Mitigated Negative Declaration.</p> <p>The document is available for a 30-day public review and comment period, from April 23- May 22. The electronic document is located at the web address: http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx</p> <p>Thank you,</p> <p><i>Dana Mahaffey</i></p> <p>Environmental Planning Services Community Development Department City of Sacramento 300 Richards Blvd. 3rd Floor Sacramento, CA 95811 (916) 808-2762</p>
	<p>Response: Thank you for your comments; they have been included in the final environmental document.</p> <p>The intersection of Dry Creek Road and Vinci Ave will be reconstructed as part of this project. Traffic Flaggers will maintain one lane of traffic at all times during construction. Busses will still be able to use the stops near the intersection. The City is only performing pavement rehabilitation activities at this intersection. There are no plans to widen Dry Creek Road or to provide any sidewalk access.</p> <p>The City's project manager for this project is:</p> <p style="text-align: center;">Dana Mahaffey, Associate Planner Community Development Department Environmental Planning Services 300 Richards Blvd., 3rd Floor Sacramento, CA 95835 Phone: (916) 808-5842 E-mail: dmahaffey@cityofsacramento.org</p>

Vinci Avenue Bridge Improvements Project (#T15125500)
Draft Initial Study/Mitigated Negative Declaration Comment Letters & Responses

2

Commenter: Rob Ferrera/SMUD
Email, Received May 13, 2015 at 5:06 PM



Powering forward. Together.

 **SMUD**TM

May 13, 2015

Dana Mahaffey
City of Sacramento
300 Richards Boulevard
Sacramento, CA 95811

Subject: MND, Vinci Avenue Bridge Improvements Project

Dear Ms. Mahaffey,

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the MND, Vinci Avenue Bridge Improvements Project. SMUD is the primary energy provider for Sacramento County and the proposed project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

It is our desire that the MND, Vinci Avenue Bridge Improvements Project will acknowledge any project impacts related to the following:

- Overhead and or underground transmission and distribution line easements. Please view the following links on smud.org for more information regarding transmission encroachment:
 - <https://www.smud.org/en/do-business-with-smud/documents/Guide-for-Transimssion-Encroachment.pdf>. Some of these requirements include the following
 - <https://www.smud.org/en/business/customer-service/support-and-services/documents/Underground-Structure-T007.pdf>
- Utility line routing
- Electrical load needs/requirements
- Energy Efficiency
- Climate Change

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed project. Please ensure that the information included in this response is conveyed to the project planners and the appropriate project proponents.

SMUD HQ | 6201 S Street | P.O. Box 15830 | Sacramento, CA 95852-0830 | 1.888.742.7683 | smud.org 

Vinci Avenue Bridge Improvements Project (#T15125500)
Draft Initial Study/Mitigated Negative Declaration Comment Letters & Responses

	<p>Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this project. Again, we appreciate the opportunity to provide input on this MND. If you have any questions regarding this letter, please contact Jose Bodipo-Memba, SMUD Environmental Specialist at (916) 732-6493.</p> <p>Sincerely,  Rob Ferrera Environmental Specialist Environmental Management Legislative & Regulatory Affairs Sacramento Municipal Utility District</p> <p>Cc: Jose Bodipo-Memba Rob Ferrera Pat Durham Joseph Schofield</p>
	<p><u>Response:</u> Thank you for your comments; they have been included in the final environmental document.</p> <p>At this time, one SMUD vault is anticipated to be relocated near the cul-de-sac on the east end of the project. The City will continue to consult with SMUD regarding any overhead or underground transmission and distribution line easements prior to the start of construction.</p>
3	<p>Commenter: Unknown Resident on Vinci Avenue Voicemail, May 18, 2015 at 11:51AM</p> <p>“Opening up Vinci Ave to more traffic will make traffic worse on my street. People speed on that street already and there are kids who play there. I am requesting traffic controls, like speed bumps, to help.”</p>
	<p><u>Response:</u> Thank you for your comments; they have been included in the final environmental document.</p> <p>The Vinci Avenue Bridge Improvements project is anticipated to improve traffic circulation within the general vicinity of the project area. Connecting Vinci Avenue between Dry Creek Road and Raley Boulevard will result in more direct access to Interstate 80; therefore, reducing the amount of vehicles and delay, due to congestion, on Dry Creek Road. No traffic controls, outside of the posted speed limit, are anticipated as a result of this project.</p>