



MITIGATED NEGATIVE DECLARATION

DEVELOPMENT SERVICES
DEPARTMENT

PLANNING DIVISION

ENVIRONMENTAL PLANNING
SERVICES
916-808-8419
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The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

P07-066 Church Street Station The proposed project would rezone three parcels totaling approximately 4.4 acres from Agricultural (A) to Single-Family Alternative (R-1A) and subdivide the site into 47 single-family lots and 2 landscape lots in the North Sacramento Community Plan Area. Project entitlements include an Inclusionary Housing Plan; a Rezone of three parcels totaling approximately 4.4 acres from Agricultural (A) to Single-Family Alternative (R-1A); a Tentative Map to subdivide approximately 4.4 acres into 49 lots; a Special Permit to allow single-family dwellings in the Single-Family Alternative (R-1A) Zone; a Variance to exceed to 40% maximum front setback paving limit to allow driveways on single-family lots and a Variance to allow reduced side yard setbacks on single-family lots.

The City of Sacramento, Development Services 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 Title 14, Section 15070 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, Development Services Department, 915 I Street, New City Hall, 3rd Floor reception desk, Sacramento, CA 95814. The public counter is open from 8:00 am to 5:00 pm; Monday through Friday.

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

By: _____

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

**Church Street Station (P07-066)
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(Revised March 21, 2008)**

The Development Services Department, Environmental Planning Services, 300 Richards Boulevard, Sacramento, CA 95811, pursuant to Title 14, Section 15070 of the California Code of Regulations, have prepared this Initial Study; the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento, and the Sacramento City Code.

This Initial Study is organized into the following sections:

SECTION I. - BACKGROUND: Provides summary background information about the project name, location, applicant, when the Initial Study was completed, and a project introduction.

SECTION II. - PROJECT DESCRIPTION: Includes a detailed description of the Proposed Project.

SECTION III. - ENVIRONMENTAL CHECKLIST AND DISCUSSION: Contains the Environmental Checklist form together with a discussion of the checklist questions. The Checklist Form is used to determine the following for the proposed project: 1) "Potentially Significant Impacts" that may not be mitigated to a less-than-significant level with the inclusion of mitigation measures, 2) "Potentially Significant Impacts Unless Mitigated" which could be mitigated with incorporation of mitigation measures, and 3) "Less-than-significant Impacts" which would be less than significant and do not require the implementation of mitigation measures.

SECTION IV. - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Identifies which environmental factors were determined to have either a "Potentially Significant Impact" or "Potentially Significant Impacts Unless Mitigated," as indicated in the Environmental Checklist.

SECTION V. - DETERMINATION: Identifies the determination of whether impacts associated with development of the Proposed Project are significant, and what, if any, additional environmental documentation may be required.

- ATTACHMENTS:**
- A – Vicinity Map**
 - B – Site Plan**
 - ~~C – Health Risk Assessment Findings~~**
 - D–CAL3QHCR Dispersion Model (Calculation of carbon monoxide and particulate matter concentrations at 4111 Rio Linda Boulevard)**
 - E- Noise Measurement Site Plan**
 - F- Inputs and Results of Noise Barrier Analysis**

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SECTION I. BACKGROUND

File Number, Project Name:

P07-066, Church Street Station

Project Location:

The proposed project site consists of approximately 4.4 acres (APN 237-0180-033, 237-0192-023 & 237-0192-024) and is located at 4111 Rio Linda Boulevard. The site is located north of Interstate 80, west of Taylor Street, east of Rio Linda Boulevard and south of Granger Avenue in the City of Sacramento, California.

Contact Information:

Project Applicant

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Introduction

The following Initial Study/Mitigated Negative Declaration has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 1500 *et seq.*). The City of Sacramento is the lead agency for the preparation of this Mitigated Negative Declaration for Church Street Station (P07-066).

The City has determined that a Mitigated Negative Declaration is the appropriate environmental document for the proposed project. This environmental review examines project effects identified as significant impacts on the environment and that may be substantially reduced or avoided by the adoption of revisions or conditions to the project. The project would be reduced to less-than-significant levels, with the implementation of appropriate mitigation measures. Therefore, a Mitigated Negative Declaration is the proposed environmental document for this project.

This analysis may incorporate by reference all or portions of other documents (located on page 6 of this document which is a matter of public record (CEQA Guidelines Section 15150(a)). These documents are available for public review at the City of Sacramento, Development Services Department, 915 I Street, New City Hall, 3rd Floor reception desk, Sacramento, CA 95814. The public counter is open from 8:00 am to 5:00 pm; Monday through Friday.

Section 15130 (d) of the CEQA Guidelines states that "No further cumulative impacts analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or area-wide cumulative impacts of the proposed project have already been adequately addressed, as defined in 15152(f) (1), in a certified EIR for the plan." The proposed project is consistent with the General Plan designation for the site, and the SGPU adequately addressed the cumulative impacts that could be associated with the project.

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 on **March 3, 2008**.

Please send written responses to:

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300 Richards Boulevard
Sacramento, CA 95811
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SECTION II—PROJECT DESCRIPTION

Environmental Setting

The proposed project site is bound by Interstate 80 to the south, single-family residential housing to the north, east, and west.

Vegetation consists of typical urban landscape and ruderal non-native grassland. Urban landscape is composed of artificially planted and maintained native and non-native plants, shrubs, and trees. Trees within the proposed project have been planted by previous property owners for fruit, shade and decorative accent. The proposed project site consists of three parcels. Two of the parcels are vacant and the third parcel has an existing single story residence with a detached garage. The existing residence is to be demolished to accommodate development of the tentative map.

No water features such as vernal pools, marshes, or seasonal wetlands, are located the site. The proposed project will not result in impacts to wetland habitats or impact Magpie Drain, a tributary of Magpie Creek (south of the project). Development of the project site could impact special-status raptor species.

Topography is level; onsite elevation is approximately 36 feet above sea level. San Joaquin silt loam soil exists within the proposed project.

Project Background

In April of 2007 an application was submitted for approval of a rezone of three parcels to subdivide approximately 4.4 acres into 47 single-family lots and 2 landscape lots.

Project Description

The proposed project would rezone three parcels totaling approximately 4.4 acres from Agricultural (A) to Single-Family Alternative (R-1A) and subdivide the site into 47 single-family lots and 2 landscape lots in the North Sacramento Community Plan Area. Project entitlements include an Inclusionary Housing Plan; a Rezone of three parcels totaling approximately 4.4 acres from Agricultural (A) to Single-Family Alternative (R-1A); a Tentative Map to subdivide approximately 4.4 acres into 49 lots; a Special Permit to allow single-family dwellings in the Single-Family Alternative (R-1A) Zone; a Variance to exceed to 40% maximum front setback paving limit to allow driveways on single-family lots and a Variance to allow reduced side yard setbacks on single-family lots.

References

Bollard Acoustical Consultants. 411 Rio Linda Boulevard Single-Family Residential Development, Sacramento, California. BAC Job # 2007-096. August 8, 2007

City of Sacramento. City of Sacramento General Plan. 1988.

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City of Sacramento. Sacramento General Plan Update DEIR (SGPU DEIR). 1988.

Environmental Resources Management. Diesel Exposure Health Risk Assessment. P07-066 Development at 4111 Rio Linda Boulevard, Sacramento, California. November 2007

Marcus H. Bole & Associates. Biological Inventory, Three Parcels: APN 237-0192, 024, & 237-0180-033, Property located at 4111 Rio Linda Boulevard, Sacramento, California. Job # 0423-2005-577. April 13, 2005

Marcus H. Bole & Associates. Phase I Environmental Liability Site Assessment, APN's 237-0192-023, 237-0192-024 & 237-0180-033, 4111 Rio Linda Boulevard, Sacramento, Sacramento County, California 95838. April 13, 2005

Sacramento Metropolitan Air Quality Management District, Guide to Air Quality Assessment. Sacramento, CA. July 2004

Sacramento Metropolitan Air Quality Management District, Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, Version 1.0 Sacramento, CA. January 2007

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Section III – Environmental Checklist and Discussion

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
<p>1. <u>LAND USE</u> <i>Would the proposal:</i></p> <p>A) Result in a substantial alteration of the present or planned use of an area?</p>			√
<p>B) Affect agricultural resources or operation (e.g., impacts to soils or farmlands, or impact from incompatible land uses?)</p>			√

Environmental Setting

The project site is currently zoned A (Agricultural Zone). The General Plan land use designation for the site is Medium Density Residential (MDR), 16-29 dwelling units per net acre. The North Sacramento Community Plan (NSCP) land use designation for the site is Residential 11-21 dwelling units per net acre.

The project site consists of three parcels. The north parcel currently contains a 1,000 square foot single-story residence, a 400 square foot garage, several concrete pads and an abandoned water well. A gravel driveway provides access to the property from Rio Linda Boulevard. The two additional southern parcels are undeveloped and unimproved.

Standards of Significance

For the purpose of this analysis, an impact is considered significant if the project would substantially alter an approved land use plan that would result in a physical change to the environment. Impacts to the physical environment resulting from the proposed project are discussed in subsequent sections of this document.

Answers to Checklist Questions

Question A

The current land use designations allow development of the proposed project site with residential land uses; however, the proposed project site is zoned agricultural. The proposed project requests to rezone the property from Agricultural (A) to Single-Family Alternative (R-1A).

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R-1A is a low to medium density residential zone intended to permit the establishment of single-family, individually owned, attached or detached residences where lot sizes, height, area and/or setback requirements vary from standard single-family.

The approximate density for the R-1A zone is ten (10) dwelling units per acre. The maximum density in this zone is fifteen (15) dwelling units per net acre. The proposed project consists of an entitlement to allow 47 single-family residential lots and 2 landscape lots. The density proposed by the project is consistent with the density allowed in the R-1A zone. Land use on the proposed project site is consistent with the residential land use designations in the surrounding vicinity.

The proposed project will not result in a substantial alternation of the planned use of the project area. Impacts to land use are ***less than significant***.

Question B

The project site does not include agricultural uses. Marcus H. Bole, Consulting Firm indicates that the past use of the property was developed into a home site during the early 1900's. Surrounding properties show a steady development from agricultural properties to residential development. Commercial agricultural operations which could result in land use conflicts with single-family residential do not exist in the project vicinity. Impacts to agriculture resources are ***less than significant***.

Findings

The proposed project would result in a less-than-significant impact to the land use of the proposed site and surrounding area and to agricultural resources.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
<p>2. <u>POPULATION AND HOUSING</u></p> <p><i>Would the proposal:</i></p> <p>A) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?</p>			√
<p>B) Displace existing housing, especially affordable housing?</p>			√

Environmental Setting

The project site is currently zoned Agricultural (A). The land use designation for the City of Sacramento General Plan is medium density residential, which calls for 16 to 29 dwellings per acre. The North Sacramento Community Plan designation is residential, allowing 11 to 21 dwellings per acre.

The proposed project site consists of three parcels. The north parcel currently contains a single-story residence, a garage, several concrete pads and an abandoned water well. A gravel driveway provides access to the property from Rio Linda Boulevard. The two additional southern parcels are undeveloped and unimproved.

The surrounding area consists of single-family residences to the north east, and west. Interstate 80 is south of the proposed project.

Standards of Significance

An impact is considered significant if the project would induce substantial growth that is inconsistent with the approved land use plan for the area or displace existing affordable housing.

Question A

The project includes a rezone from Agricultural (A) to Single-Family Alternative (R-1A). The proposed project is consistent with the General Plan and North Sacramento Community Plan designations for the site and would not exceed the maximum density allowed in the R-1A zone. The project proposes a density of eleven units per acre. The proposed project would not exceed the maximum amount of fifteen dwelling units per R-

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1A zoning and would be compatible to the surrounding areas which are fully developed to the east, north and west. The proposed project includes connections to water, sewer and storm drain mains. The project would not directly or indirectly induce substantial growth in the project area and the impact is ***less than significant***.

Question B

The applicant is proposing to construct 47 single-family residences. Development of the proposed project would displace a single-story residence and a garage. The proposed project would result in a net increase of 46 residential units on the project site.

The proposed project would not induce substantial growth that is greater than that anticipated within the area's approved land use plans. The project would displace a single house, but the demolished structure would be replaced with 47 new single-family residences. The impacts to population and housing would be ***less than significant***.

Findings

The proposed project would develop the project site in a manner that is consistent with the applicable planning regulations. The project would not induce growth that is greater than that anticipated within the area's approved land use plans. The proposed project would displace existing housing, but would increase available housing in the vicinity. The impacts to population and housing would be less than significant.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
3. SEISMICITY, SOILS, AND GEOLOGY Would the proposal result in or expose people to potential impacts involving:			√
A) Seismic hazards?			√
B) Erosion, changes in topography or unstable soil conditions?			√
C) Subsidence of land (groundwater pumping or dewatering)?			√
D) Unique geologic or physical features?			√

Environmental Setting

Seismicity. The Sacramento General Plan Update (SGPU) Draft Environmental Impact Report (DEIR) identifies all the City of Sacramento as being subject to potential damage from earthquake ground shaking at a maximum intensity of VIII of the Modified Mercalli scale (SGPU DEIR, 1987, T-16). No active or potentially active faults are known to cross within close proximity to the project site

Topography. Terrain of the proposed site is relatively flat. The elevation of the proposed project is approximately 36 feet above sea level.

Geology. The surface geology of the project site consists of Quaternary alluvium. Quaternary alluvium consists of gravel, sand, silt and clay deposited by present day stream and river systems.

Soils. According to the Soils Survey of Sacramento County prepared by the US Department of Agriculture Soil Conservation Services, the project site is primarily underlain with Madera-Galt complex soil. The Madera-Galt complex soil consists of moderately deep and moderately well drained soils. The Madera soil has a low water capacity, a slow runoff, with slight water erosion. The Galt soil has a low water capacity, runoff is slow, and is not susceptible to water erosion.

Standards of Significance

An impact is considered significant if it allows a project to be built that will introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

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Answers to Checklist Questions**Question A**

Because no active or potentially active faults are known in the project area, the proposed project would not be subject to the rupture of a known earthquake fault.

The SGPU determined that an earthquake of Intensity VII on the Modified Mercalli Scale is a potential event due to the seismicity of the region. Such an event would cause alarm and moderate structural damage could be expected. People and property on the site could be subject to seismic hazards, such as ground shaking, liquefaction, and settlement, which could result in damage or failure of components of the proposed project. This seismic activity could disrupt utility service due to damage or destruction of infrastructure, resulting in unsanitary or unhealthful conditions or possible fires or explosion from damaged natural gas lines.

The City is located in Zone 3 of the Uniform Building Code (UBC) Seismic Risk Map, and the City requires that all new structures be designed and constructed consistent with the UBC's Zone 3 requirements. Compliance with the California Uniform Building Code (CUBC) (Title 24) would minimize the potential for adverse effects on people and property due to seismic activity by requiring the use of earthquake protection standards in construction.

Implementation of applicable regulations, codes and standard engineering practices would mitigate any constraints on development of the proposed project site related to ground shaking or secondary seismic hazards. Therefore, the impacts due to seismic activity would be ***less than significant*** and no mitigation is required.

Question B

Topography of the project site is relatively flat, and changes in topography would not be substantial because the project does not propose significant site grading. Madera-Galt complex soil has a slight hazard of erosion. The City of Sacramento Department of Utilities would require Best Management Practices (BMP's) (e.g., use of erosion controlled barriers, hydro-seeding) to minimize erosion and sedimentation during grading.

The applicant/developer would be required to comply with the City's Grading, Erosion and Sediment Control Ordinance (Title 15). This ordinance requires the applicant to prepare erosion and sediment control plans for both construction and operation impacts of the proposed project, prepare preliminary and final grading plans, and prepare plans to control urban runoff pollution from the project site. The ordinance also requires preparation of a Post Construction Erosion and Sediment Control Plan to minimize the increase of urban runoff pollution caused by development of the area. Storm drain maintenance is required at all drain inlets. The project would include on-site source and treatment controls as required by the updated Table 2-1 Stormwater Quality Standards for Development Projects in the Guidance Manual for On-Site Stormwater Quality Control Measures (January 2000).

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Compliance with the standard City requirements would ensure that impacts related to erosion, changes in topography or exposure to unstable soil conditions are ***less than significant***.

Question C

According to the SGPU DEIR, no significant subsidence of land has occurred within the City of Sacramento (T-13). State regulations and standards related to geotechnical considerations are reflected in the Sacramento City Code. Construction and design would require complying with the latest City-adopted code at the time of construction, including the Uniform Building Code. The Code would require construction and design of buildings to meet standards that would reduce risks associated with subsidence or liquefaction.

The proposed residential subdivision does not include below-grade features, such as basements, which would require extensive excavation. Well data from the State of California Department of Water Resources indicate the depth of the groundwater approximately one mile from the proposed project is approximately 33 feet below the ground surface. Given the depth of the groundwater in proximity, there is no chance of encountering groundwater during excavation. Construction of the proposed project is not anticipated to require groundwater pumping or dewatering.

Based on this analysis, there is no potential for subsidence of land due to the removal of groundwater and the impact is ***less than significant***.

Question D

No recognized unique geologic features or physical features exist on the project site. Related impacts to such features are ***less than significant***.

Findings

The proposed project would have less-than-significant impacts due to seismicity, soils, or geology.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
<p><u>4. WATER</u> Would the proposal result in or expose people to potential impacts involving:</p> <p>A) Changes in absorption rates, drainage patterns, or the rate and amount of surface/stormwater runoff (e.g. during or after construction; or from material storage areas, vehicle fueling/maintenance areas, waste handling, hazardous materials handling & storage, delivery areas, etc.)?</p>			√
<p>B) Exposure of people or property to water related hazards such as flooding?</p>			√
<p>C) Discharge into surface waters or other alteration of surface water quality that substantially impact temperature, dissolved oxygen or turbidity, beneficial uses of receiving waters or areas that provide water quality benefits, or cause harm to the biological integrity of the waters?</p>			√
<p>D) Changes in flow velocity or volume of stormwater runoff that cause environmental harm or significant increases in erosion of the project site or surrounding areas?</p>			√
<p>E) Changes in currents, or the course or direction of water movements?</p>			√
<p>F) Change in the quantity of ground waters, either through direct additions or withdrawal, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?</p>			√
<p>G) Altered direction or rate of flow of groundwater?</p>			√
<p>H) Impacts to groundwater quality?</p>			√

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Environmental Setting*Drainage/Surface Water.*

The project site is within Basin 157, which flows to Sump 157. The proposed development would drain directly into Magpie Drain, which is adjacent to Interstate 80 and the project site.

Water Quality. The City's municipal water is received from the American River and Sacramento River. The water of the American River is considered to be of very good quality. The Sacramento River water is considered to be of good quality, although higher sediment loads and extensive irrigated agriculture upstream of Sacramento tend to degrade the water quality. During the spring and fall, irrigation tail waters are discharged into drainage canals that flow to the river. In the winter, runoff flows over these same areas. In both instances, flows are highly turbid and introduce large amounts of herbicides and pesticides into the drainage canals, particularly rice field herbicides in May and June. The aesthetic quality of the river is changed from relatively clear to turbid from irrigation discharges.

The Central Valley Regional Water Quality Control Board (RWQCB) has primary responsibility for protecting the quality of surface and groundwater within the city. The RWQCB's efforts are generally focused on preventing the introduction of the new pollutants into bodies of water that fall under its jurisdiction.

The RWQCB is concerned with all potential sources of contamination that may reach both these subsurface water supplies and the rivers through direct surface runoff or infiltration. Storm water runoff is collected in City drainage facilities and is sent directly to the Sacramento River. The RWQCB implements water quality standards and objectives that are in keeping with the State of California Standards.

The City of Sacramento has obtained a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board under the requirements of the Environmental Protection Agency and Section 402 of the Clean Water Act. The goal of the permit is to reduce pollutants found in storm runoff. The general permit requires the permittee to employ BMP's before, during, and after construction. The primary objective of the BMP's is to reduce non-point source pollution into waterways. These practices include structural and source control measures for residential areas and BMP's for construction sites. BMP mechanisms minimize erosion and sedimentation, and prevent pollutants such as grease from entering the storm water drains. BMP's are approved by Department of Utilities before beginning construction (the BMP document is available from the Department of Utilities, Engineering Services Division, 1395 35th Avenue, Sacramento, CA). Components of BMP/s include:

- maintenance of structures and roads;
- flood control management;
- comprehensive development plans;
- grading, erosion and sediment control measures;
- inspection and enforcement procedures;
- reduction of pesticide use; and
- site-specific structural and non-structural control measures.

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Flooding. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map revised as of February 18, 2005 indicates that the project site is within the Flood Zone X. The flood zone identifies areas of 500-year flood and areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood. Within the X zone, there are no requirements to elevate or flood proof structures.

Standards of Significance

Surface/Ground Water. For the purposes of this analysis, a significant impact occurs if: the project substantially degrades water quality and violates any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by consumption and/or operation activities or

Flooding. An impact is significant if it would substantially increase exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

Answers to Checklist Questions**Questions A, C and D**

Development of the proposed project would alter absorption rates and surface runoff, due to the addition of paved surfaces and buildings (impervious surfaces). The project's drainage system would drain directly into Magpie Drain, located adjacent to the proposed development site and Interstate 80.

During construction, the applicant/developer would be required to comply with the City's Grading, Erosion and Sediment Control Ordinance (Title 15). This ordinance requires the applicant to prepare erosion and sediment control plans for both during and post construction of the proposed project, preliminary and final grading plans, and plans to control urban runoff pollution from the project site during construction. This ordinance also requires that a Post Construction Erosion and Sediment Control Plan be prepared to minimize the increase of urban runoff pollution caused by development of the area. The project is not served by a regional water quality basin but is less than twenty (20) acres and source controls are required. Improvement plans must include the source control measures selected for the site as required by the update Table 3-2 Stormwater Quality Control Measure Selection Matrix in the Stormwater Quality Design Manual (May 2007).

Because the project is required to comply with the City's ordinances, the project impacts to water quality would be ***less than significant***.

General Stormwater Construction Permit

Development of the site would be required to comply with regulations involving the control of pollution in storm-water discharges under the National Pollutant Discharge Elimination System (NPDES) program (Section 402(p), Clean Water Act) and the City's NPDES permit.

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The development work area is greater than one acre, so the developer would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP), which would include information on runoff, erosion control measures to be employed, and any toxic substances to be used during construction activities. Surface runoff and drainage primarily limited to areas disturbed by grading during construction. Short term, construction-related, erosion control would be readily available by means of Best Management Practices (BMP's) (e.g., use of erosion control barriers, hydro-seeding, etc.) Long term erosion control would be accomplished by establishing vegetation and controlling surface water flow.

The SWRCB requires that the best available technology that is economically achievable and best conventional pollutant control technology be used to reduce pollutants. These features would be discussed in the SWPPP. A monitoring program would be implemented to evaluate the effectiveness of the measures included in the SWPPP. The RWQCB may review the final drainage plans for the project components.

Compliance with all applicable regulatory requirements, designed to maintain and improve water quality from development activities, would ensure that the proposed project would have a ***less-than-significant*** impact on drainage and water quality.

Question B

The project site is located within Flood Zone X. The Flood Zone identifies areas of 500-year flood and areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood. Impacts from flooding are anticipated to be ***less than significant***.

Question E

Stormwater runoff from the project site should not affect the capacity of local rivers to receive drainage from Magpie Drain. The project site would be developed consistent with the existing Community Plan and General Plan designation which allow single-family residential uses. For these reasons, the project would not change currents, course, or direction of water movements and the impacts are anticipated to be ***less than significant***.

Questions F & H

Water for the proposed project would be provided by the City of Sacramento, which receives most of its water from surface water sources (for more detail, see the Utilities section). The project would not include large subsurface features or wells, and would consequently not likely effect the direction or rate of flow of ground water. If de-watering is necessary during construction, it is not anticipated to result in amounts or depths that would significantly effect the direction or rate of flow of ground water. Therefore, compliance with the RWQCB requirements would ensure a ***less-than-significant*** impact on groundwater.

Findings

This project would result in less-than-significant impacts to water resources.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
5. AIR QUALITY <i>Would the proposal:</i> A) Violate any air quality standard or contribute to an existing or projected air quality violation?			√
B) Exposure of sensitive receptors to pollutants?			√
C) Alter air movement, moisture, or temperature, or cause any change in climate?			√
D) Create objectionable odors?			√

Environmental Setting

The project area is located in the Sacramento Valley Air Basin, which is bounded by the Sierra Nevada on the east and the Coast Range on the west. Prevailing winds in the project area originate primarily from the southwest. These winds are the result of marine breezes coming through the Carquinez Straits. These marine breezes diminish during the winter months, and winds from the north occur more frequently at this time. Air Quality within the project area and surrounding region is largely influenced by urban emission sources.

The project proposes to construct single-family dwellings, which will be placed within 500 feet of Interstate 80. The Sacramento Metropolitan Air Quality Management District and the California Air Resources Board recommend that sensitive land uses be sited no closer than 500 feet from a freeway or other high traffic roadway due to exposure to diesel particulate matter. ~~To assess the toxic air contaminants, a Health Risk Assessment was prepared for the proposed project at 411 Rio Linda Boulevard by Environmental Resources Management (ERM) in December 2007.~~

Regulatory Setting

Air quality management responsibilities exist at local, state, and federal levels of government. Air quality management planning programs were developed during the past decade generally in response to requirements established by the federal Clean Air Act (CAA) and the California Clean Air Act of 1988 (CCAA).

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The Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for control of stationary- and indirect-source emissions, air monitoring, and preparation of air quality attainment plans in the Sacramento County portion of the Sacramento Valley Air Basin (SVAB).

Both the State of California and the federal government have established ambient air quality standards for several different pollutants. For some pollutants, separate standards have been set for different periods of the year. Most standards have been set to protect public health, although some standards have been based on other values, such as protection of crops, protection of materials, or avoidance of nuisance conditions.

The pollutants of greatest concern in the project area are carbon monoxide (CO), ozone, and inhalable particulate matter smaller than or equal to 10 microns in diameter (PM₁₀).

Based on ozone levels recorded between 1988 and 1991, the Sacramento County portion of the SBAB was classified by the CAA as a severe non-attainment area, with attainment required by 1999. Sacramento County is still classified as a non-attainment area for ozone.

Sacramento County is federally designated as a moderate non-attainment area for PM₁₀. Monitoring data have verified that no violation of the federal PM₁₀ standards has occurred in the four most recent years for which data are available, allowing the SMAQMD to request a re-designation from non-attainment to attainment of the federal standards. SMAQMD is currently working with the EPA in preparing a report for the re-designation from non-attainment to attainment, and it is expected to be completed within the next few years.

For CO, the region is designated as unclassified attainment by the EPA, and is also designated as being in attainment by the State. The State of California has designated the region as being a serious non-attainment area for ozone, and a non-attainment area for PM₁₀.

Standards of Significance

The SMAQMD adopted the following thresholds of significance in 2002:

Ozone. An increase of nitrogen oxides (NO_x) above 85 pounds per day for short-term effects (construction) would result in significant impact. An increase of either ozone precursor, nitrogen oxides (NO_x) or reactive organic gases (ROG), above 65 pounds per day for long-term effects (operation) would result in a significant impact.

Particulate Matter. The threshold of significance for PM₁₀ is a concentration based threshold equivalent to the California Ambient Air Quality Standard (CAAQS). For PM₁₀, a project would have a significant impact if it would emit pollutants at a level equal to or greater than five percent of the CAAQS (50 micrograms/cubic meter for 24 hours) if there were an existing or projected violation; however, if a project is below the ROG and NO_x thresholds, it can be assumed that the project is below the PM₁₀ thresholds well (SMAQMD, 2004).

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Carbon Monoxide. The pollutant of concern for sensitive receptors is carbon monoxide (CO). Motor vehicle emissions are the dominant source of CO in Sacramento County (SMAQMD, 2004). For purposes of this environmental analysis, sensitive receptor locations generally include sidewalks and residences. Carbon monoxide concentrations are considered significant if they exceed the 1-hour state ambient air quality standard of 20.0 parts per million (ppm) or the 8-hour state ambient standard of 9.0 ppm.

Project-related air emissions would have a significant effect if they result in concentrations that create either a violation of an ambient air quality standard or contribute to an existing air quality violation.

Answers to Checklist Questions**Questions A and B**Construction Impacts

The URBEMIS 2007 9.2.2 model was also used to calculate estimated emissions for the construction of the proposed project. Based on the estimated emissions from the URBEMIS model, the proposed project is not likely to exceed the short-term emissions threshold of 85 lbs/day for NO_x. Estimated NO_x emissions using the URBEMIS 2007 9.2.2 model were calculated to be approximately 66.69 lbs/day, which is below the 85 lbs/day threshold.

The SMAQMD Guide to Air Quality Assessment (p. 3-2) states that if the project's NO_x mass emissions from heavy-duty, mobile sources is determined not potentially significant using the recommended methodologies for estimating emissions (Manual Calculation, URBEMIS, and Roadway Construction Model), then the Lead Agency may assume that exhaust emissions of other pollutants from operation of equipment and worker commute vehicles are also not significant. The URBEMIS 2007 9.2.2 model indicated that the project would not exceed the NO_x threshold, and the emissions of ROG and PM₁₀ are also less than significant.

Construction activities would be required to comply with SMAQMD's Rule 403 on Fugitive Dust, which states that 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:

- the use 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.
- the application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;
- other means approved by the Air Pollution Control Officer.

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Compliance with this rule will further reduce impacts associated with the proposed project.

Operational Impacts

In order to assess whether mobile source emissions for ozone precursor pollutants (NO_x and ROG), PM₁₀ and CO are likely to exceed the standards of significance due to operation of the project, an initial project screening was performed using Table 4.2 Project Sizes with Potentially Significant Emissions, which is included within the SMAQMD *Guide to Air Quality Assessment* (July 2004). The function of the table is to provide project sizes for land use types which, based conservatively on default assumptions for modeling inputs using the URBEMIS 2007 9.2.2, are likely to result in mobile source emissions exceeding the SMAQMD thresholds of significance for ROG and NO_x (SMAQMD 2004, p. 4-2).

SMAQMD considers development projects of the type and size that fall below the significance cut-points in Table 4.2 for ROG and NO_x also to be insignificant for CO emissions (SMAQMD 2004, p. 5-2). SMAQMD has indicated that PM₁₀ emissions from development projects, if they are of the type and size below the cut-points in Table 4.2 for ROG and NO_x, may likewise be considered not significant. However, this assumption applies only to projects that do not generate trips by heavy-duty diesel vehicles in greater proportion than such trips occur generally on public roadways (SMAQMD 2004, p. 5-2). The proposed project would not generate such trips.

Projects categorized as "Single Family Residential" land use development types are considered potentially significant at the NO_x Screening Level for operational impacts at 656 units or greater. The number of units to be developed for the proposed project is 47, which is well below the Table 4.2 threshold for single family residential. No potentially significant operational impacts to air quality due to mobile source emissions are identified for these criteria pollutants. Impacts are ***less than significant***.

The URBEMIS 2007 9.2.2 model was also used to calculate estimated emissions for the operation of the proposed project. Based on the estimated emissions from the URBEMIS 2007 9.2.2 model, the proposed project is not likely to exceed the operational emissions threshold of 65 lbs/day for ROG and NO_x. Estimated ROG and NO_x emissions using the URBEMIS 2007 9.2.2 model were calculated to be approximately 5.03 lbs/day and 4.88 lbs/day, respectively, which is below the 65 lbs/day threshold. Impacts from operation of the project are ***less than significant***.

Proximity to freeway

The proposed project is located in an increasingly urban environment; therefore, future residents would be exposed to pollution common to growing urban areas. The main source of particulate pollution near the project site is Interstate 80. A California Air Resources Board April 2005 study analyzed the effects of living in close proximity to high-volume roads (defined as freeways or urban roads with 100,000 vehicles per day). The report stated that (the association of traffic-related emissions with adverse health effects was seen within 1,000 feet and was strongest within 300 feet. This demonstrates that the adverse effect diminished with distance." Resulting from this study was the recommendation to avoid siting new sensitive land uses within 500 feet of a freeway,

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urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day. The proposed project would be sited approximately 120 feet from Interstate 80. The Sacramento Metropolitan Air Quality Management District (SMAQMD) has established formal protocol for evaluating the risks associated with siting sensitive land use with 500 feet of high-volume roads. The proposed project site is approximately 120 feet north of an east-west roadway with approximate peak hour traffic of 11,500 vehicles per hour. According to the table below, siting the project at the proposed location would result in an incremental cancer risk of 339 per million.

PROJECTS NORTH AND SOUTH OF AN EAST-WEST ROADWAY Version 1.0								
Peak Hour Traffic (vehicle/hr)	Receptor Distance from Edge of Nearest Travel Lane (feet)							
	10	25	50	100	200	300	400	500
Incremental Cancer Risk Per Million: North (downwind)								
4000	210	186	153	114	75	57	45	39
8000	420	372	309	228	150	114	90	75
12000	630	558	462	339	222	168	135	114
16000	837	741	615	453	297	225	180	153
20000	1047	927	768	567	372	279	228	192
24000	1257	1113	924	681	447	336	273	228
Incremental Cancer Risk Per Million: South (upwind)								
4000	117	96	75	54	36	27	21	18
8000	234	192	153	108	69	51	42	36
12000	351	291	228	165	105	78	63	54
16000	468	387	306	219	138	105	84	69
20000	582	486	381	273	177	132	105	87
24000	699	582	459	327	210	159	126	105

The SMAQMD protocol states that if the determined risk is below the evaluation criterion of 446 per million was selected as that level of risk corresponding to a 70 percent reduction from the highest risk calculated at 10 feet from the edge of the nearest travel lane to the nearest receptor for the highest peak traffic volume reported by Caltrans for Sacramento County (24,000 vehicle per hour) east (downwind) of a north-south roadway. The highest risk represents the worst case siting situation within the boundaries of the SMAQMD.

The proposed project specific incremental cancer risk is below the evaluation criterion of 446 per million. According to SMAQMD Protocol, a Health Risk Assessment is not recommended; and the City of Sacramento considers the impact of TAC from the highway to sensitive receptors to be ***less than significant.***

~~The Sacramento Metropolitan Air Quality Management District (SMAQMD) has prepared a Protocol for evaluating projects that are located within 500 feet of freeways or heavily traveled roadways. According to SMAQMD protocols a HRA was required for this project to evaluate risks associated with Toxic Air Contaminants. A Health Risk Assessment was prepared on December 2007 for the project. Attachment C explains in detail the Health Risk Assessment findings.~~

~~Construction and operation of the proposed project are anticipated to not exceed thresholds of criteria pollutants, and because construction of the proposed project would comply with SMAQMD Guidelines. In addition, the diesel particulate matter emissions in~~

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~~the Health Risk Assessment for the proposed project were found to be below city, state and federal guidelines.~~

~~The proposed project is anticipated to result in a **less-than-significant** impact related to sensitive receptors, short and long term emissions.~~

Question C

Significant changes in air movement can result from the construction of tall or large-mass structures. Construction of buildings that result in the shading of adjoining buildings or parcels for a significant part of the day can result in temperature changes in the project vicinity. Temperature and moisture changes can also result from the construction of structures that emit large quantities of air that is significantly different in temperature and/or humidity than the surrounding environment. There are no structures tall enough to significantly affect air movement and temperature in the vicinity of the proposed project site.

Because the existing and proposed structures are not tall enough, or of a mass, to significantly affect air movement and/or temperature changes and there are no proposed land uses that emit large quantities of humidity or heated cool air; the proposed project would result in a **less-than-significant** impact related to changes in climate.

Question D

Emissions from construction vehicles could create some short-term objectionable odors; however, any construction-related odors would be temporary. Because residential uses do not typically generate objectionable odors, the proposed project would have a **less-than-significant** impact.

Findings

Compliance with the regulatory requirements would ensure that the proposed project will have a less-than-significant impact on air quality.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
6. TRANSPORTATION/CIRCULATION			
Would the proposal result in:			
A) Increased vehicle trips or traffic congestion?			√
B) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			√
C) Inadequate emergency access or access to nearby uses?			√
D) Insufficient parking capacity on-site or off-site?			√
E) Hazards or barriers for pedestrians or bicyclists?			√
F) Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			√
G) Rail, waterborne or air traffic impacts?			√

Environmental Setting

The existing roadway component of the transportation system within the study area is described below.

Existing Roadways.

Regional automobile access to the site is provided primarily by Interstate 80. Access to and from Interstate 80 is provided at Rio Linda Boulevard (directly east of the site). Local automobile access is provided by a system of arterial and collector roadways in the project vicinity. Arterial roadways include Northwood Boulevard, Jessie Avenue and Rio Linda Boulevard.

Norwood Boulevard is a north-south four-lane arterial that connects Interstate 80 to Jessie Avenue.

Jessie Avenue is an east-west two lane arterial that connects Norwood Avenue to Rio Linda Boulevard.

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Rio Linda Boulevard is a north-south two-lane arterial that connects Jessie Avenue to Interstate 80.

Taylor Street is a two lane collector roadway that is directly west of the project that provides north-south access between Granger Avenue and Jessie Avenue.

Granger Avenue is a two lane collector roadway that is directly north of the project that provides east-west access between Rio Linda Avenue and Taylor Street.

Standards of Significance

The following Standards of Significance have been established in assessing the impacts of proposed projects on the transportation facilities.

- Roadways:*
- (1). An impact is considered significant for roadways when the project causes the facility to degrade from LOS C or better to LOS D or worse.
 - (2). For facilities that are already worse than LOS C without the project, an impact is also considered significant if the project increases the v/c ratio by 0.02 or more on a roadway.
- Signalized and unsignalized Intersections:*
- (1). An impact to the intersections is considered significant if the Project causes the LOS of the intersections to degrade from LOS C or better to LOS D or worse.
 - (2). For intersections that are already operating at LOS D, E, or F without the Project, an impact is significant if the implementation of the Project increases the average delay by 5 seconds or more at an intersection.
- Transit Facilities:*
- An impact is considered significant if the implementation of the project will cause one or more of the following:
- (1). The project-generated ridership, when added to the existing or future ridership, exceeds existing and/or planned system capacity. Capacity is defined as the total number of passengers the system of buses and light rail vehicles can carry during the peak hours of operation.
 - (2). Adversely affect the transit system operations or facilities in a way that discourages ridership (e.g., removes shelter, reduces park and ride).
- Bicycle Facilities:*
- An impact is considered significant if the implementation of the project will cause one or more of the following:
- (1). eliminate or adversely affect an existing bikeway facility in a way that discourages the bikeway use;

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- (2). interfere with the implementation of a proposed bikeway;
- (3). result in unsafe conditions for bicyclists, including unsafe bicycle/pedestrian or bicycle/motor vehicle conflicts.

Pedestrian Facilities: An impact is considered significant if the project will adversely affect the existing pedestrian facility or will result in unsafe conditions for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflicts.

Answers to Checklist Questions

Question A

The City's Development Engineering Division estimated the trip generation to be below the threshold in the a.m. and in the p.m. peak hours. The proposed project would not result in a significant impact on the existing or future roadway system. This determination considered whether the proposed project would result in degradation of a LOS on roadways or at intersections, whether the project would increase the volume to capacity ratio by 0.02 or more, and whether the project would increase the average stopped delay by five seconds or more at an intersection already operating worse than LOS C.

Trip generation was estimated using the ITE's Trip Generation, Seventh Edition. The total number of additional trips estimated for the proposed project is 519 daily vehicle trips, 42 a.m. peak-hour trips and 54 p.m. peak-hour trips (Personal Communication, Zarah Bringas, November 11, 2007). The total project peak-hour number of trips would not be considered substantial and would not be anticipated to degrade LOS on roadways or intersections to unacceptable levels. The proposed project would result in a ***less-than-significant*** impact related to increased vehicle trips and traffic congestion.

Questions B & E

Pursuant to section 16.48.110 of the City of Sacramento Code, improvements shall be designed and constructed to City standards in place at the time that the Building Permit is issued. All improvements shall be designed and constructed to the satisfaction of the Development Engineering Division. There would be no hazards to safety from design features or incompatible uses.

The proposed project would dedicate a modified 69-ft right-of-way cross-section that shall consist of a 5-ft sidewalk, 6.5-ft planter and vertical curb and gutter, 6-ft bike lane, two 12-ft travel lanes and a 12-ft median planter. The sidewalk and 1/2 feet portion of the planter shall be located within the P.U.E./Pedestrian easement.

The developer would be required to apply for a sub-modification for the non-standard elbow located west of Street A. The developer would be required to exert best effort to obtain the easement for the round corner at the intersection of B Street and Rio Linda

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Boulevard, adjacent to the neighboring property. No parking would be allowed for the first 100-feet of Street A and Street B.

The proposed project would not result in unsafe conditions for pedestrians, including unsafe bicycle/pedestrian or pedestrian/motor vehicle conflicts. Impacts of the project related to design hazards or hazards to bicyclist/pedestrians would be ***less than significant***.

Question C

Existing road infrastructure provides adequate emergency access to the proposed project site. The project site shall be designed to appropriate standards, to the satisfaction of the City of Sacramento's the Development Services Department, Development Engineering Division and Fire Department. Potential emergency access impacts are ***less than significant***.

Question D

City Code Section 17.64.020 identifies the parking requirements by land use type. The project provides 94 spaces, and complies with the code requirements. There is space for grading equipment and construction workers to park on-site during construction and for use as a staging area for the project. As a result, the project would have a ***less-than-significant*** impact on parking.

Question F

A bus stop exists north of the proposed project off Jessie Avenue. The proposed project area has bus service provided to the area by routes 18 and 19. Route 18 connects with the Marconi-Arcade light rail station and Route 19 connects with the Arden-Del Paso light rail station. The proposed project would not interfere with existing modes of alternative transportation or decrease the level of service provided by Regional Transit and the impact is ***less than significant***.

Question G

There are no railroad tracks or navigable waterways within, or adjacent to the project site. Impacts to rail or waterways would be ***less than significant***.

Findings

The project would result in less-than-significant impacts to transportation and circulation.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
7. BIOLOGICAL RESOURCES Would the proposal result in impacts to:			
A) Endangered, threatened or rare species or their habitats (including, but not limited to plants, fish, insects, animals and birds)?		√	
B) Locally designated species (e.g., heritage or City street trees)?			√
C) Wetland habitat (e.g., marsh, riparian and vernal pool)?			√

Environmental Setting

The following discussion is based on a Biological Inventory of 4111 Rio Linda Boulevard including APN's 237-0192-023 & 024, 237-0180-033 prepared by Marcus H. Bole & Associates during the time period of March 23, 2005 and April 12, 2005.

Site Description

The project site is bordered by Granger Road to the north, a concrete-lined drainage feature (Magpie Drainage) to the south, a residential subdivision to the west and vacant land exists the east. The site consists of urban landscape and ruderal non-native grassland. No heritage trees exist onsite. No sensitive fish or mammal species would be impacted by the proposed project. The project would not result in impacts to wetland habitats.

Heritage Trees

Chapter 12.56 of the City of Sacramento Code protects City trees and Chapter 12.64 of the City Code protects heritage trees. Chapter 12.56 defines a City tree as any tree growing in a public street right-of-way. Chapter 12.64 of the City Code defines a heritage tree as (1) Any tree of any species with a trunk circumference of one hundred (100) 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 *Quercus* species, *Aesculus californica* or *Platanus racemosa*, having a circumference of thirty-six (36) inches or greater when a single trunk, or a cumulative circumference of thirty-six (36) inches or greater when a multi-trunk, (3) Any tree thirty-six (36) inches in circumference or greater in a riparian zone, and (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.

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Jurisdictional Waters

No water features such as vernal pools, marshes, seasonal wetlands are located on or adjacent to, the site. Magpie Drainage (a concrete lined drainage canal) is adjacent to the proposed project.

Special Status Species

Swainson's hawk (*Buteo swainsoni*) is a raptor species currently listed as threatened in California by the California Department of Fish and Game. The Swainson's hawk typically nest in tall cottonwoods, valley oaks, or willows associate with riparian corridors, grassland, irrigated pasture, and other cropland with a high density of rodents. The Central Valley population typically breeds and nests in late spring through early summer before migrating to Central American and South American for the winter.

Federally listed vernal pool branchiopods, including the threatened vernal pool fairy shrimp (*Branchinecta lynchi*) and the endangered vernal pool tadpole shrimp (*Lepidurus packardi*) have are known to occur in the Rio Linda area. Other non-listed branchiopods known to occur in the region include California linderiella (*Linderiella occidentalis*) and midvalley fairy shrimp (*Branchinecta mesovallensis*). The branchiopod species listed above are generally restricted to vernal pools and/or other seasonally ponded wetlands that sustain inundation during the winter before drying up in the late spring.

Marcus Bole and Associates (MBA) performed a Biological Inventory including a wetland determination during the time period of March 23 to April 12, 2005. In the Biological Inventory for 4111 Rio Linda Boulevard, MBA states that no special-status fish or mammal species exist onsite.

The Migratory Bird Treaty Act (MBTA) makes it unlawful to "take" (kill, harm, harass, etc) any migratory bird listed in 50 CFR 10, including their nests, eggs, or products. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, and many others.

Marcus Bole and Associates did not observe any raptor nests onsite.

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;
- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands); or
- Violate the Heritage Tree Ordinance (City Code Chapter 12.64).

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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 definitions of rare or endangered under the California Environmental Quality Act (CEQA);

Answers to Checklist Questions**Question A**

Development of the project site could impact special-status raptor species. Swainson’s hawk or other birds of prey could begin nesting prior to construction. Swainson’s hawk and other raptor species occupy nests generally from March 1 to August 31. Construction activities that disturb nesting migratory birds during the breeding season would be a **potentially significant** impact. Mitigation measures to reduce impact significance are provided in the discussion below.

Mitigation Measures

B-1a To mitigate impacts to Swainson’s hawk and other raptors during the nesting season (February 1 through September 15), the project applicant(s) shall retain a qualified biologist to conduct preconstruction surveys and to identify active nests on and within 0.5 mile of the project site. The surveys shall be conducted prior to the approval of grading and/or improvement plans (as applicable) and no more than 30 days before the beginning of construction. To the extent feasible, guidelines provided in Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in the Central Valley (Swainson’s Hawk Technical Advisory Committee 2000) shall be followed. If construction occurs outside of the nesting season, no surveys will be required.

If no nests are found, no further mitigation is required.

If active nests are found, impacts to nesting Swainson’s hawks and other raptors shall be avoided by establishment of appropriate buffers around the nests. No project activity shall commence within the buffer area until a qualified biologist confirms that any young have fledged and the nest is not longer active. DFG guidelines recommend implementation of 0.25-mile buffers for most raptors and 0.5-mile buffers for Swainson’s hawk, but the size of the buffer may be adjusted if

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a qualified biologist and the City in consultation with DFG, determine that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist during and after construction activities will be required if the activity has potential to adversely affect the nest.

- 1b. Trees on the site that need to be removed to accommodate construction shall be felled between September 15 and January 31, outside of the general nesting season for raptors and other birds. Alternately, a pre-construction survey for nesting birds shall be conducted prior to tree removal between February 1 and September 15.

Question B

The Biological Resources Report prepared by Marcus Bole and Associate identified the vegetation on the project site as urban landscape and ruderal non-native grassland. Urban landscape is composed of artificially planted and maintained native and non-native plants, shrubs, and trees. Trees within the study area have been planted by previous property owners for fruit, shade and decorative accent. Any impact to these trees would not be considered significant due to their non-native status or the poor condition of the trees. None of the trees on the project site qualify as Heritage Trees. City street trees are not likely to be affected by the proposed project.

Because the proposed project would not impact Heritage or City Street trees, impacts would be ***less than significant***.

Question C

No wetland habitat exists on the project site. Therefore, the proposed project would have a ***less-than-significant*** impact on wetlands.

Findings

With implementation of mitigation measures, the proposed project would result in ***less-than-significant*** impacts for biological resources.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
8. <u>ENERGY</u>			
Would the proposal result in impacts to:			
A) Power or natural gas?			✓
B) Use non-renewable resources in a wasteful and inefficient manner?			✓
C) Substantial increase in demand of existing sources of energy or require the development of new sources of energy?			✓

Environmental Setting

The Sacramento Municipal Utility District (SMUD) supplies electricity to the City of Sacramento. Pacific Gas and Electric (PG&E) is the natural gas utility for the City of Sacramento. Not all areas are currently provided with gas service. Distribution conduits are located throughout the City, usually underground along City and County public utility easements (PUEs).

Standards of Significance

A significant impact would result if the project would use non-renewable resources in a wasteful and inefficient manner, or create a substantial new demand for energy resources.

Answers to Checklist Questions

Questions A – C

The project would consume fossil fuels during construction. The project site is located in an urbanized portion of the community, and is served by existing utility services. The project site is designated for residential uses. The project would not create a substantial new demand for energy services, and would be required to comply with the state energy efficiency standards required of all new development. The project’s impact to energy sources would be **less than significant**.

Findings

The project would result in a less-than-significant impact to energy resources.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
<p>9. HAZARDS</p> <p><i>Would the proposal involve:</i></p> <p>A) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?</p>		✓	
<p>B) Possible interference with an emergency evacuation plan?</p>			✓
<p>C) The creation of any health hazard or potential health hazard?</p>		✓	
<p>D) Exposure of people to existing sources of potential health hazards?</p>		✓	
<p>E) Increased fire hazard in areas with flammable brush, grass, or trees?</p>			✓

Environmental Setting

The project site consists of three parcels. The north parcel currently contains a 1,000 square foot single-story residence, a 400 square foot garage, several concrete pads, and an abandoned water well and abandoned septic system. The two additional southern parcels are undeveloped and unimproved.

A Phase I Environmental Liability Site Assessment for 4111 Rio Linda Boulevard by Marcus H. Bole and Associates was prepared on April 13, 2005.

Standards of Significance

For the purposes of this document, 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
- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during de-watering activities; or
- expose people (e.g., residents, pedestrians, construction workers) to increase fire hazards.

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Answers to Checklist Questions**Questions A, C & D**

The proposed land uses would be expected to use pesticides, fuels, and household chemicals associated with residences and landscaping. The amounts of the substances would be relatively minor.

Marcus Bole and Associates did not find any confirmed environmental hazards or Recognized Environmental Conditions (RECs) associated with the subject property or adjacent properties with the exceptions that the concrete pads indicate a former residence that could have been served by an onsite septic system and water well. The exact location of both the septic system and water well is currently unknown. Further investigation shall be conducted to locate and secure the proper permits with the following mitigation (if applicable):

H-1 The onsite septic system shall be properly abandoned in accordance with the County of Sacramento, Environmental Management Department, Water Protection Division regulations. If the tank has previously been abandoned, verification from the County of Sacramento, Environmental Management Department, Water Protection Division shall be required prior to grading permits.

H-2 The drinking water well should be properly abandoned in accordance with the County of Sacramento, Environmental Management Department, Water Protection Division regulations. If the well has previously been abandoned, verification from the County of Sacramento, Environmental Management Department, Water Protection Division shall be required prior to grading permits.

The project proposes the development of a residential subdivision. These land uses are not anticipated to create or use substantial amounts of materials that could result in the creation of significant health hazards.

The project would not result in a release of potentially hazardous materials, would not create a hazard, or expose people to a hazard. With implementation of the mitigation measures, impacts would be ***less than significant***.

Question B

The proposed site plan has been reviewed for adequacy by the City of Sacramento Fire Department. Recommendations by the Fire Department were incorporated into the site design. The project site is located in an urbanized portion of the community, and is served by local roadways that provide routes for travel in emergencies. The proposed project would result in a ***less-than-significant*** impact associated with interference with an emergency evacuation plan.

Questions E

The project site currently consists of developed urban land. Project site landscaping is maintained and does not pose a fire hazard. Development of the project site would not

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increase the potential for fire hazard. Therefore, impacts associated with fire hazards are considered to be ***less than significant***.

Findings

With implementation of mitigation measures, the proposed project would result in ***less-than-significant*** impacts for hazards.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
<p>10. <u>NOISE</u></p> <p><i>Would the proposal result in:</i></p> <p>A) Increases in existing noise levels?</p> <p style="padding-left: 40px;">Short-term</p> <p style="padding-left: 40px;">Long Term</p>		<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	
<p>B) Exposure of people to severe noise levels?</p> <p style="padding-left: 40px;">Short-term</p> <p style="padding-left: 40px;">Long Term</p>		<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	

Environmental Setting

The proposed single-family residential development is located at 4111 Rio Linda Boulevard, just north of Interstate 80. The project site is located north of Interstate 80, west of Taylor Street, east of Rio Linda Boulevard and south of Granger Avenue in the City of Sacramento, California. The primary source of noise in the area is Interstate 80.

Standards of Significance

Thresholds of significance are those established by the Title 24 standards and by the City's General Plan Noise Element and the City Noise Ordinance. Noise and vibration impacts resulting from the implementation of the proposed project would be considered significant if they cause any of the following results:

- Exterior noise levels at the proposed project, which are above the upper value of the normally acceptable category for various land uses (SGPU DEIR AA-27) caused by noise level increases due to the project. The maximum normally acceptable exterior community noise exposure for residential backyards it is 60 dB Ldn, and for residential interior it is 45 dB Ldn;
- Residential interior noise levels of 45 Ldn or greater caused by noise level increases due to the project; and
- Construction noise levels not in compliance with the City of Sacramento Noise

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Ordinance.

Construction-generated sound is exempt from limits if construction activities take place between the hours of 7:00 a.m. and 6:00 p.m. Monday-Saturday and between 9:00 a.m. and 6:00 p.m. on Sundays as specified in Section 8.68.080 of the City of Sacramento Noise Ordinance.

Answers to Checklist Questions**Questions A and B**Exterior Traffic Noise Exposure

On May 11 to 13, 2005 and August 2 to 3, 2007, Bollard Acoustical Consultants, Inc. conducted noise level measurements on the undeveloped project site. Short-term (15-minute) measurements were completed at Sites 1 and 2 while long-term (24 hours) measurements were completed at Site 3 (See Attachment D for noise measurement sites).

Unmitigated traffic noise exposure measured at Site 3 was recorded at approximately 71 dB L_{dn} during both the 2005 and 2007 noise level measurement surveys. Noise level data collected during the 2005 measurements showed that there was no appreciable change in the noise exposure at Site 2 and Site 3, while additional acoustical shielding provided by the elevated roadway provided about 3 dB of noise level reduction at Site 1 relative to Site 3. Therefore, existing, unmitigated traffic noise exposure at Sites, 1, 2, and 3 are assumed to be 68 dB L_{dn} , 71 dB L_{dn} and 71 dB L_{dn} , respectively.

Bollard Acoustical estimates that future traffic noise exposure may be as much as 2 dB above existing (2007) conditions, producing unmitigated, exterior noise exposure at Sites, 1, 2 and 3 of approximately 70 dB L_{dn} , 73 dB L_{dn} and 73 dB L_{dn} , respectively. Future project homes would provide some acoustical shielding from Interstate 80 traffic noise at proposed backyard activity areas. The backyards at Lots 21 and 22 would experience about 3 to 5 dB of insertion loss (the difference in sound level at a receiver location with and without the presence of a noise barrier, assuming no change in the sound level of the source) from project homes, depending on the receiver location and building orientation. Based on these assumptions and the assumed future unmitigated noise exposure at the measurement sites, future traffic noise exposure within backyards is estimated at 21, 22 through 32, and 33 would be approximately 67 dB L_{dn} , 68 dB L_{dn} and 69 dB L_{dn} , respectively. These levels are 2 to 4 dB above the 65 dB L_{dn} level and 7 to 9 dB above the 60 dB L_{dn} limit that are normally acceptable.

Interior Traffic Noise Exposure

Future, mitigated Interstate 80 traffic noise exposure at the closest proposed backyards and first-floor building setbacks would not be expected to exceed 65 dB L_{dn} given the recommended noise barrier construction illustrated in Attachment D. A future exterior traffic noise exposure of approximately 72 to 75 dB L_{dn} may be expected at second-floor building elevations along Interstate 80. This exposure is higher than at first-floor elevations due to diminished ground attenuation and limited noise attenuation

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performance from the recommended property line noise barrier. To meet the established 45 dB L_{dn} interior noise exposure criterion, proposed second-floor building facades directly adjacent to Interstate 80 would be required to provide a minimum exterior-to-interior noise level (NLR) of approximately 30 dB ($75 \text{ dB } L_{dn} - 30 \text{ dB NLR} = 45 \text{ dB } L_{dn}$).

Standard residential construction would be expected to provide no less than 25 dB of NLR assuming windows and exterior doors are closed. Additional noise-mitigating building construction improvements would likely be required for compliance with the applicable 45 dB L_{dn} interior noise level standard at second-floor rooms adjacent to Interstate 80.

Exterior Traffic Noise Mitigation

Bollard Acoustical Consultants, Inc. used an appropriate noise barrier performance analysis methodology to determine the noise level reduction (or insertion loss) performance provided by different barrier heights. The inputs and results of this analysis are presented in Attachment E. The traffic noise source is assumed to be 30 feet above the project elevation.

As shown in Attachment E (Insertion Loss Calculation Spreadsheet), noise barriers of reasonable/feasible heights would not satisfy the 60 dB L_{dn} “normally acceptable” criterion. The following mitigation would provide the required insertion loss (2 to 4 dB) needed to comply with the City of Sacramento’s “conditionally acceptable” exterior noise exposure standard of 65 dB L_{dn} within all proposed project backyards.

N-1 A noise barrier shall be constructed with solid construction, such as masonry or stucco, with no gaps or holes that would compromise noise insulation performance along the southern, western and eastern property lines of the proposed project. A solid noise barrier of 8 feet high above building pad elevations shall be required on the southern side of, lots 21 through 33. A solid noise barrier of 7 feet shall be required along the western side of lot 21. A solid noise barrier of 6 feet shall be required for the western side of the proposed project along lots 15 through 20. A solid noise barrier of 6 feet shall be required along the eastern side of lots 1, 47 and 22.

With this mitigation measure the noise impacts would be reduced to a ***less-than-significant*** level.

Interior Traffic Noise Mitigation

Future traffic noise levels from Interstate 80 within proposed first-floor dwellings is not expected to exceed the applicable 45 dB L_{dn} interior noise level criterion with the following mitigation:

N-2 The second-floor windows at south, west, and east-facing building facades on Lots 20 through 33 shall have sound transmission class (STC) performance of no less than 35. The second-floor windows at west and east-facing facades on Lots 16 through 19, west facing facades on Lots 34 through 36, and east-facing facades on Lots 1 and 47, shall provide STC 32 or higher.

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- N-3** All project buildings shall include mechanical systems that provide appropriate heating, cooling, and ventilation so that windows and doors may remain closed when needed for noise insulation.

Construction Noise

The proposed project may temporarily increase noise in the area due to construction activities. However, the City of Sacramento Noise Ordinance exempts construction-related noise taking place between the hours of 7:00 a.m. and 6:00 p.m., on Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday. Increases in noise levels resulting from construction activities would be temporary, and would be required to comply with the City's Noise Ordinance. The impact would be less than significant.

Findings

With implementation of mitigation measures, the proposed project would result in ***less-than-significant*** impacts for noise.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
11. PUBLIC SERVICES Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:			
A) Fire protection?			✓
B) Police protection?			✓
C) Schools?			✓
D) Maintenance of public facilities, including roads?			✓
E) Other governmental services?			✓

Environmental Setting

The nearest Sacramento Metropolitan Fire Department stations to the proposed project site are; Station No. 15 located at 1591 Newborough Drive in Sacramento, Station No. 20 located at 300 Arden Way in Sacramento, Station No.14 located on 1341 North C Street in Sacramento, Station No. 2 located at 1229 I Street in Sacramento, and Station No. 18 located at 746 North Market Boulevard in Sacramento.

The area is served by the Sacramento City Police Department. The William J. Kinney Police Facility is located three miles southeast of the site at 3550 Marysville Boulevard.

The proposed project site is within the San Juan Unified School District.

Standards of Significance

For the purposes of this report, 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 roadway maintenance, or other governmental services; the construction of which could cause significant environmental effects.

Answers to Checklist Questions

Questions A – E

The City’s General Fund and other special collections such as Measure G, state school funds and developer fees provide the financial support to achieve basic safety, school, library and park services. Police/fire personnel, schools, libraries, and parks provide a wide range of services that are affected by population increases.

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Fire Protection

Implementation of the project would result in an increase in the demand for fire protection and emergency services. However, the proposed project is required to incorporate design features identified in the Uniform Building Code and the Uniform Fire Code. The Fire Department is given the opportunity to review and comment on the design of any proposed project that could affect fire safety. The incorporation of fire safety measures required by the Uniform Building Code and the Uniform Fire Code, as well as City permitting requirements, would reduce any physical fire safety impacts associated with the project to a less than significant level.

In addition, the proposed project size and compatibility with surrounding land uses would not significantly increase the anticipated demand for fire protection service in the area over what was anticipated in the SGPU.

Police

The City of Sacramento Police Department provides police protection services within the City of Sacramento. The Department takes an active role in crime prevention through the Crime Prevention through Environmental Design Program. This program requires new development to coordinate with the Community Resources Division of the Police Department to facilitate public safety through appropriate design of new residential developments. The incorporation of City permitting requirements and Crime Prevention through Environmental Design Program are expected to reduce any physical public safety impacts associated with the project to a less than significant level.

In addition, the proposed project size and compatibility with surrounding land uses would not significantly increase the anticipated demand for police protection service in the area over what was anticipated in the SGPU.

Schools

The State of California has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the State passed Assembly Bill 2926 (AB 2926) in 1986. This bill allowed school districts to collect impact fees from developers of new residential building space.

Senate Bill 50 (SB 50) and Proposition 1A (both passed in 1998) provide a comprehensive school facilities financing and reform program. Provisions of SB 50 prohibit local agencies from denying legislative land use approvals on the basis that school facilities are inadequate. According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." These provisions will remain in place as long as subsequent state bonds are approved and available.

Development of the proposed project would be required to pay school impact fees to compensate for the impacts of the residential development on local school capacity in order to maintain adequate classroom seating and facilities standards. Pursuant to SB 50, payment of fees to the School Districts is considered full mitigation for project impacts, including impacts related to the provision of new or physically altered school

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facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance standards for schools. Thus, although the proposed project would add students, the project would pay development fees to the school districts, which is considered full mitigation for project impacts under SB 50.

Findings

The proposed project would result in less-than-significant impacts to public services.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
<p>12. UTILITIES</p> <p><i>Would the proposal result in the need for new systems or supplies, or substantial alterations to the following utilities:</i></p> <p>A) Communication systems?</p> <p>B) Local or regional water supplies?</p> <p>C) Local or regional water treatment or distribution facilities?</p> <p>D) Sewer or septic tanks?</p> <p>E) Storm water drainage?</p> <p>F) Solid waste disposal?</p>			<p style="text-align: center;">✓</p>

Environmental Setting

Water. The City of Sacramento is identified as the water supplier for the proposed project. The project is within the City's Water Service Area. The City of Sacramento obtains water from three sources: the American River, the Sacramento River, and groundwater wells. Treated water is currently produced at two water treatment plants: the Fairbairn Water Treatment Plant (WTP) on the American River, and the Sacramento WTP on the Sacramento River.

Surface Water Rights: According to the City's Urban Water Management Plan (UWMP) (p. 4-2), the City holds an annual surface water entitlement of 81,000 acre-feet from the Sacramento River, and, ultimately, 245,000 acre-feet from the American River. The total annual diversion allowed by the City's four American River permits is 245,000 acre-feet at build-out of these entitlements in the year 2030. The maximum total combined water supply from both the Sacramento and American River by the year 2030 is 326,800 acre-feet.

According to the UWMP (p. 6-1), about 18 percent of the City's water demand is currently met through groundwater wells. The groundwater is generally of good quality. The City focuses on surface water and minimizes reliance on groundwater to avoid water quality problems and reduce the City's contribution to possible groundwater overdraft conditions.

Water Supply. Water supply facilities in the project area include 8" inch and 30" inch water mains located in Rio Linda Boulevard. A short water main extension from the existing 8" to the 30" would be required.

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Stormwater Drainage. The project site is within Drainage Shed 157, which flows to Sump 157. The proposed project would drain directly into Magpie Drainage, which is adjacent to the development site and Interstate 80.

Sewage. The Sacramento Regional County Sanitation District (SRCSD) provides sewage treatment for the cities of Folsom and Sacramento and County Sanitation District (CSD-1), which serves the unincorporated urban portions of the County and portions of Sacramento. The SRCSD is responsible for the operation of all regional interceptors and wastewater treatment plants, while local collection districts operate the system that transport less than 10 million gallons of waste flow daily. This portion of the City is served by the City Utilities Department, although treatment is provided by SRCSD.

Solid Waste. The project is required to meet the City's Recycling and Solid Waste Disposal Regulations (Chapter 17.72 of the Zoning Ordinance). The purpose of the ordinance is to regulate the location, size, and design of features of recycling and trash enclosures in order to provide adequate, convenient space for the collection, storage, and loading of recyclable and solid waste material for existing and new development; increase recycling of used materials; and reduce litter. City solid waste collection services transport waste to the Sacramento Recycling and Transfer Station, located at 8191 Fruitridge Road, where it is ultimately transported to Lockwood Landfill in Nevada. The Lockwood Landfill has an approximate 40-year capacity.

Standards of Significance

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

- create an increase in water demand of more than 10 million gallons per day;
- substantially degrade water quality;
- generate more than 500 tons of solid waste per year;
- generate storm water that would exceed the capacity of the storm water system or
- result in a determination by the wastewater collection and treatment provider that it does not have adequate capacity to serve the project's projected demand in addition to existing commitments.

Answers to Checklist Questions**Question A**

The South Natomas Community Plan and General Plan designate this site as Residential. The proposed project is consistent with the intended development for the site. The project site is located in an urbanized portion of the community, and is served by existing communications systems. Impacts to communication systems would be ***less than significant***.

Questions B and C

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Based on the figures presented in the City's UWMP, Sacramento's water supply is sufficient through year 2030. The UWMP illustrates the City's ability to meet foreseen water demand and indicates that the City of Sacramento has sufficient water rights and the infrastructure to deliver water in normal, single-dry, and multiple-dry years. The City would continue water conservation programs to reduce demand with the City (P. 7-4). Project impacts would be ***less than significant***.

Question D

The existing sewer main would provide adequate sewage flows from the project site. The design and construction of wastewater facilities are subject to review and approval of the Department of Utilities and the County Sanitation District (CSD-1). With the development requirements established by the Department of Utilities, the proposed project would have a ***less-than-significant*** impact on sewer services.

Question E

The project site is within Drainage Shed 157, which flows to Sump 157. The proposed project would drain directly into Magpie Drainage, which is adjacent to the development site and Interstate 80.

All drainage improvements would be required to be developed to the satisfaction of the Department of Utilities. All drainage lines would be placed within the asphalt section of public rights-of-way as per the City's Design and Procedures Manual. The storm drain system shall be designed to conform to the master drainage plan for the area.

Because the Department of Utilities will ensure that project's drainage system is appropriately sized and is connected appropriately to the City's drainage system, the project impacts on the City's drainage facilities would be ***less than significant***.

Question F

The project is required to meet the City's Recycling and Solid Waste Disposal Regulations (Chapter 17.72 of the Zoning Ordinance). The purpose of the ordinance is to regulate the location, size, design of features of recycling and trash enclosures in order to provide adequate, convenient space for the collection, storage, and loading of recyclable and solid waste material for existing and new development; increase recycling of used material; and reduce litter.

There is sufficient capacity for the solid waste generated by the City of Sacramento. Keifer Landfill has capacity until 2035 at the current throughput, and the Lockwood landfill has capacity for the 250 to 300 years.

For these reasons, it is anticipated that development of the proposed project would result in ***less-than-significant*** impacts from solid waste.

Findings

The proposed project would result in less-than-significant impacts to utility systems.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
13. <u>AESTHETICS, LIGHT AND GLARE</u> Would the proposal:			
A) Affect a scenic vista or adopted view corridor?			✓
B) Have a demonstrable negative aesthetic effect?			✓
C) Create light or glare?			✓

Environmental Setting

The project site is not in an adopted view corridor or a scenic vista. The project site consists of three parcels. The north parcel currently contains a 1,000 square foot single story residence, a 400 square foot garage and an abandoned water well. The two additional southern parcels are undeveloped and unimproved.

Standards of Significance

Visual impacts would include obstruction of a significant view or the introduction of a façade which lacks visual interest and compatibility which would be visible from a public gathering or viewing area.

Glare. Glare is considered to be significant if it would be cast in such a way as to cause public hazard or annoyance for a sustained period of time.

Light. Light is considered significant if it would be cast onto oncoming traffic or residential uses.

Answers to Checklist Questions

Questions A

The project site is not located within an identified scenic corridor or viewshed. Any impacts to an identified scenic corridor or viewshed would be ***less than significant***.

Question B

The project would be required to comply with the City of Sacramento’s guidelines for the development of structures, which would ensure that the appearance of the project is compatible with existing development in the project vicinity (Single Family Residential Design Principles, January 1998).

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For these reasons, the impacts related to a negative aesthetic effect would be ***less than significant***.

Questions C

Single-family residences are not typically considered to be substantial sources of glare, due to the limited height and the limited amount of reflective surface area (i.e., glass and metal surfaces), and the project would not result in substantial adverse affects associated with glare.

The proposed project would require improvements to the City's right-of-way. These improvements include the installation of street lighting. The lighting would be installed and shielded consistent with City standards. With the design and orientation of lighting in compliance with the City standards and shading of the windows on the buildings, impacts associated with light and glare would be ***less than significant***.

Findings

The project would have a less-than-significant impact to visual resources.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
14. <u>CULTURAL RESOURCES</u>			
<i>Would the proposal:</i>			
A) Disturb paleontological resources?		✓	
B) Disturb archaeological resources?		✓	
C) Affect historical resources?		✓	
D) Have the potential to cause a physical change, which would affect unique ethnic cultural values?			✓
E) Restrict existing religious or sacred uses within the potential impact area?			✓

Environmental Setting

The proposed project is not in a Primary Impact Area as defined by the Sacramento General Plan Update Draft Environmental Impact Report (SGPU) (DEIR, V-5). The SGPU defines a Primary Impact Area as an area that is most sensitive to urban development due to the potential presence of cultural resources. The proposed project site has two structures onsite, one single-family residence and a garage and a shed. Both structures do not have cultural or historical value.

Standards of Significance

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 or site or unique geologic feature.

Answers to Checklist Questions**Questions A – D**

Although there are no known cultural/historic resources, during construction previously unidentified cultural or historical resources may be unearthed. This would be a significant impact. The following mitigation measures would address the impact.

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Mitigation Measures

CR-1 The applicant shall hire a qualified archaeologist to conduct a records search for the project site, including a search of the North Central Information System at CSU Sacramento. The qualified archaeologist shall provide recommendations for mitigation should any resource be identified on the project site by the records search. Prior to issuance of grading permits, the applicant shall provide proof that the records search has been performed and that any cultural resources identified on the project site have been mitigated according to the recommendations of the qualified archaeologist.

CR-2a In the event that any prehistoric subsurface archeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, animal bone, obsidian and/or mortars are discovered during construction-related earth-moving activities, all work within 50 meters of the resources shall be halted, and the City shall consult with a qualified archeologist to assess the significance of the find. Archeological test excavations shall be conducted by a qualified archeologist to aid in determining the nature and integrity of the find. If the find is determined to be significant by the qualified archeologist, representatives of the City and the qualified archeologist shall coordinate to determine the appropriate course of action. All significant cultural materials recovered shall be subject to scientific analysis and professional museum curation. In addition, a report shall be prepared by the qualified archeologist according to current professional standards.

CR-2b If a Native American site is discovered, the evaluation process shall include consultation with the appropriate Native American representatives.

If Native American archeological, ethnographic, or spiritual resources are involved, all identification and treatment shall be conducted by qualified archeologists, who are certified by the Society of Professional Archeologists (SOPA) and/or meet the federal standards as stated in the Code of Federal Regulations (36 CFR 61), and Native American representatives, who are approved by the local Native American community as scholars of the cultural traditions.

In the event that no such Native American is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be consulted. If historic archeological sites are involved, all identified treatment is to be carried out by qualified historical archeologists, who shall meet either Register of Professional Archeologists (RPA), or 36 CFR 61 requirements.

CR-3 If a human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find, and the County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, who shall notify the

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person most likely believed to be a descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. No additional work is to take place within the immediate vicinity of the find until the identified appropriate actions have taken place.

Implementation of these mitigation measures would reduce the impact to a ***less-than-significant*** level.

Question E

There are no known existing religious or sacred uses on the project site. Therefore, it is not anticipated that religious or sacred uses will be impacted by the proposed project, and a ***less-than-significant*** impact would occur.

Findings

The project would have less-than-significant impacts on cultural resources with the incorporation of the above mitigation measures.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
<p>15. <u>RECREATION</u></p> <p><i>Would the proposal:</i></p> <p>A) Increase the demand for neighborhood or regional parks or other recreational facilities?</p>			✓
<p>B) Affect existing recreational opportunities?</p>			✓

Environmental Setting

There are no existing recreational amenities on the project site. Robla Community Park, Sacramento Northern Parkway and Redding Park are located within a mile of the project site. Northgate Park includes an 18.50-acre park facility, Sacramento Northern Parkway consists of 57.90 acres of bicycle trails and Redding Park includes a picnic area with a full sized soccer field.

Standards of Significance

Recreation impacts would be considered significant if the project created a new demand for additional recreational facilities or affect existing recreational opportunities.

Answers to Checklist Questions

Questions A and B

The project would result in the construction of residences, and an increase in the number of persons utilizing recreational resources in the vicinity of the project. The project is consistent with the General Plan designation for the site, and would not generate a greater impact on such resources than has been identified in the City’s planning process. The project would be responsible for paying Quimby fees to mitigate impacts to park facilities. The relatively small increase in population that would result from the project would result in a **less-than-significant** impact related to recreational facilities.

Findings

The proposed project would result in **less-than-significant** impacts to recreational resources.

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Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
<p>16. <u>MANDATORY FINDINGS OF SIGNIFICANCE</u></p> <p>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? Disturb paleontological resources?</p>		✓	
<p>B. Does the project have the potential to achieve short-term, to the disadvantage of long-term environmental goals?</p>			✓
<p>C. 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.)</p>			✓
<p>D. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>			✓

Question A

As discussed in the preceding sections, the proposed project, with the implementation of the mitigation measures, would not degrade the quality of the environment, including effects on animals or plants. The proposed project may affect cultural resources within the project site. Mitigation language has been included in the case that previously unidentified cultural or paleontological resources are uncovered during construction. Mitigation has been proposed in order to reduce these impacts to ***less-than-significant*** levels.

Question B

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The project does not require a variance from any regulations in order to be constructed. The proposed project would not result in short-term goals to the disadvantage of long term environmental goals because all significant impacts of the project can be mitigated to a ***less-than-significant*** level.

Question C

Section 15130 (d) of the CEQA Guidelines state that “No further cumulative impacts analysis is required when a project is consistent with a general, specific, matter or comparable programmatic plan where the lead agency determines that the regional or area-wide cumulative impacts of the proposed project have already been adequately addressed.”

The proposed project would create a significant impact to biological resources and cultural resources. However, all impacts would be reduced to a less-than-significant level with mitigation. None of these impacts would affect offsite resources. Therefore, there would be no cumulative impacts.

For these reasons, there are no cumulatively considerable impacts and the impact is ***less than significant***.

Question D

The project does not have environmental effects that could cause substantial adverse effects on human beings, either directly or indirectly. The environmental effect on humans would be ***less than significant***.

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

SECTION IV. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

- | | |
|--|--|
| <input type="checkbox"/> Land Use and Planning | <input checked="" type="checkbox"/> Hazards |
| <input type="checkbox"/> Population and Housing | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Geological Problems | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Water | <input type="checkbox"/> Utilities and Service Systems |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Aesthetics, Light & Glare |
| <input type="checkbox"/> Transportation/Circulation | <input checked="" type="checkbox"/> Cultural Resources |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Energy and Mineral Resources | <input checked="" type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> None Identified | |

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

SECTION V. DETERMINATION

On the basis of the initial evaluation:

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

- X I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because the project-specific mitigation measures described in Section III have been added to the project. A NEGATIVE DECLARATION will be prepared.

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

Signature

Date

Kristin Ford
Printed Name

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION



Attachment A
Vicinity Map

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

Attachment C Health Risk Assessment Findings

Emissions input into the air dispersion model consists of grams of particulate matter (PM) per mile of roadway and vehicle counts per unit time. The PM emission factor used in the model was obtained from EMFAC2007, a vehicle emissions model developed by the California Air Resource Board. An emission factor for diesel trucks was assessed from these data. EMFAC2007 was run for Sacramento County for the year 2006; the most recent year for which vehicle count data are available from Caltrans (<http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm>). The Caltrans website provides peak-hour traffic data. The peak-hour traffic count from this portion of Interstate 80 is 11,500 vehicles per hour.

The dispersion model is capable of modeling different hourly traffic scenarios for each day of the week. However, this analysis used the same data for each day of the week because the Caltrans data are only given for one weekday. These traffic counts were multiplied by the percentage that is diesel trucks.

The diesel truck percentage was obtained from the 2005 Truck Traffic Report for Caltrans; Traffic Operations website cited above. This is the most recent year of truck data available. Both truck and passenger car data are provided in the Caltrans Truck Traffic Report in terms of annual average daily traffic volumes. In addition, the truck volumes are divided into axle groups. It was assumed that three-axle and greater are diesel-fueled, while two-axle are gasoline-fueled. The percentage of three-axle and greater (diesel-fueled) trucks relative to total vehicles at the Interstate 80 location in the Caltrans Truck Traffic Report most representative of the project site (Junction Interstate 80 and Interstate 5) is 3.87%. The use of annual average data to estimate the percentage of diesel trucks compensate to some extent to use of peak traffic counts to represent both weekday and weekend truck travel, though the overall analysis is still believed to be conservative since truck volumes are down on the weekends and not all 3-axle and above trucks are diesel-powered. The emission calculations are above.

Sacramento Metropolitan Air Quality Management District protocol recommends the use of the CAL3QHCR dispersion model. An air dispersion model is a computer model that simulates the transport and dispersion of air pollutant plumes from emission sources to estimate potential ground-level air pollutant concentrations at specified distances from the emission sources. CAL3QHCR is a Gaussian line source dispersion model developed by the United States Environmental Protection Agency for calculation of carbon monoxide and particulate matter concentrations at locations (receptors) near roadways from vehicles traveling on roadways. This model incorporates hourly traffic data for all 24 hours in a day and each day of the week, in addition to the use of hourly meteorological data. Thus the model inputs include traffic counts for each hour, emission rates (in grams per mile) for each hour, meteorological data, and roadway link and receptor coordinates. Annual concentrations were modeled since the health effects of concern were long term (lifetime cancer risk and chronic non-cancer health effects). CAL3QHCR output files for the runs with 2006 emissions and traffic data can be found at the end of this document in Attachment C.

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

~~The CAL3QHCR model requires the input of an hourly meteorological data set consisting of hourly wind speed, wind direction, temperature, atmospheric stability (a measure of the atmosphere's susceptibility to disperse pollutants due to thermal and turbulent forces), and mixing height (a measure of the vertical constraint to atmospheric mixing). As recommended in the SMAQMD protocol, surface meteorological data collected at Sacramento Executive Airport in 1987 were used. Mixing height data were calculated using upper air data collected at the Oakland International Airport, the closest location where upper air data are collected. The meteorological data set (surface and upper air data) was provided by SMAQMD.~~

~~Sacramento Metropolitan Air Quality Management District protocol recommends the use of the CAL3QHCR dispersion model. An air dispersion model is a computer model that simulates the transport and dispersion of air pollutant plumes from emission sources to estimate potential ground-level air pollutant concentrations at specified distances from the emission sources. CAL3QHCR is a Gaussian line source dispersion model developed by the United States Environmental Protection Agency for calculation of carbon monoxide and particulate matter concentrations at locations (receptors) near roadways from vehicles traveling on roadways. This model incorporates hourly traffic data for all 24 hours in a day and each day of the week, in addition to the used of hourly meteorological data. Thus the model inputs include traffic counts for each hour, emission rates (in grams per mile) for each hour, meteorological data, and roadway link and receptor coordinates. Annual concentrations were modeled since the health effects of concern were long term (lifetime cancer risk and chronic non-cancer health effects. CAL3QHCR output files for the runs with 2006 emissions and traffic data can be found at the end of this document in Attachment C.~~

~~The CAL3QHCR model requires the input of an hourly meteorological data set consisting of hourly wind speed, wind direction, temperature, atmospheric stability (a measure of the atmosphere's susceptibility to disperse pollutants due to thermal and turbulent forces), and mixing height (a measure of the vertical constraint to atmospheric mixing). As recommended in the SMAQMD protocol, surface meteorological data collected at Sacramento Executive Airport in 1987 were used. Mixing height data were calculated using upper air data collected at the Oakland International Airport, the closest location where upper air data are collected. The meteorological data set (surface and upper air data) was provided by SMAQMD.~~

~~Receptors were placed at three locations along the southern border of the Church Street Station LLC property, approximately 360 feet from the center of westbound Interstate 80. In addition, three receptors were placed along the centerline of the property parallel to Interstate 80 approximately 360 feet from the center of westbound Interstate 80 to estimate potential impacts at the center of the property.~~

~~The highest average diesel particulate matter concentration in the residential areas was estimated be $0.23 \mu\text{g}/\text{m}^3$ at ground level at the southeast corner of the proposed development, 150 feet from the center of westbound Interstate 80 (the maximally exposed individual location). The unit risk factor for the diesel particulate matter is $3 \times 10^{-4} (\mu\text{g}/\text{m}^3)^{-1}$, thus this equates to 70-year cancer risk of 69.0 in one million.~~

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

~~There are 47 housing units in the proposed development. If it assumed there would be an average of four persons per housing unit, this provides an estimate of 188 total persons. The estimated average diesel particulate matter concentration at the receptors placed along the central points of the proposed development was calculated to be 0.11 $\mu\text{g}/\text{m}^3$ at ground level. This is equivalent to cancer risk of 33 in one million assuming continuous 70-year outdoor exposure. If this value is used to represent the average 70-year exposure across the development, multiplication by 188 persons provides an estimate of 0.0062 total expected actual cancer cases. This result is much less than 1.0, indicating a high likelihood that an actual cancer case in the exposed population would not occur as a result of the assessed diesel particulate matter.~~

~~Diesel particulate matter also presents potential chronic non-cancer health risks. This is assessed by comparison to the Office of Environmental Health Hazard Assessment "chronic reference exposure level" for diesel particulate matter, which is 5 $\mu\text{g}/\text{m}^3$. The highest diesel particulate matter concentration modeled in this study was 0.23 $\mu\text{g}/\text{m}^3$ at the maximally exposed individual location. Dividing by the chronic reference exposure level, this results in a hazard index of about 0.046. This value is well below the non-cancer health effects threshold of 1.0. Therefore, diesel particulate matter exposure in the project area does not result in a significant non-cancer health risk.~~

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

Time of Day	Off ——— Peak Volume ——— to Peak ——— Volume Ratio ^b	Vehicles/Hour	Per-Link Veh/Hr	Emission Rate (g/vmt) ^c
Hr-00	0.15	66.8	33.4	0.416
Hr-01	0.061	27.1	13.6	0.416
Hr-02	0.071	31.6	15.8	0.416
Hr-03	0.039	17.4	8.7	0.416
Hr-04	0.067	29.8	14.9	0.416
Hr-05	0.12	53.4	26.7	0.416
Hr-06	0.465	206.9	103.5	0.416
Hr-07	0.938	417.5	208.7	0.416
Hr-08	0.887	394.8	197.4	0.416
Hr-09	0.56	249.2	124.6	0.416
Hr-10	0.587	261.2	130.6	0.416
Hr-11	0.734	326.7	163.3	0.416
Hr-12	0.757	336.9	168.5	0.416
Hr-13	0.747	332.5	166.2	0.416
Hr-14	0.858	381.9	190.9	0.416
Hr-15	0.873	388.5	194.3	0.416
Hr-16	0.918	408.6	204.3	0.416
Hr-17	1	445.1	222.6	0.416
Hr-18	0.692	308.0	154.0	0.416
Hr-19	0.517	230.1	115.0	0.416
Hr-20	0.398	177.1	88.6	0.416
Hr-21	0.405	180.2	90.1	0.416
Hr-22	0.303	134.9	67.4	0.416
Hr-23	0.228	101.5	50.7	0.416

Church Street Station — Rio-Ling

Peak Hour Volume — All Vehicles = 11500

Peak Hour Diesel Truck Volume = 445

Percent Trucks = 3.87%

^a Truck volumes were derived by applying a ration of average annual truck traffic to average annual total traffic. These data were obtained from the Caltrans traffic operations website. All 3-axle and greater trucks were assumed to be diesel; 2-axle trucks were assumed to be gasoline fueled.

^b The off-peak to peak hour traffic volume rations were obtained fro the *Recommended Protocol for Evaluating Location of Sensitive Land Uses Adjacent to Major Roadways*, Sacramento Metropolitan Air Quality Management District, 2007.

^c Emission factor from EMFAC2007 run for 2006 model year, rate summary.

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

Attachment D
CAL3QHCR
Dispersion Model

PAGE: 1

CAL3QHCR (Dated: 04244)

DATE : 10/16/ 7
TIME : 11:42:22

JOB: 4111 RIO LINDA BLVD SACRAMENTO

RUN: I-80 AT RIO LINDA BLVD IN SACRAMENTO

=====
General Information
=====

Run start date: 1/ 1/87 Julian: 1
end date: 12/31/87 Julian: 365

A Tier 2 approach was used for input data preparation.

The MODE flag has been set to p for calculating PM averages.

Ambient background concentrations are included in the averages below.

Site & Meteorological Constants

VS = 0.0 CM/S VD = 0.0 CM/S ZO = 175. CM ATIM = 60.

Met. sfc. Sta. Id & Yr = 23232 87
Upper Air Sta. Id & Yr = 23230 87

Urban mixing heights were processed.

In 1987, Julian day 1 is a Thursday.

The patterns from the input file have been assigned as follows:

- Pattern # 1 is assigned to Monday.
- Pattern # 1 is assigned to Tuesday.
- Pattern # 1 is assigned to Wednesday.
- Pattern # 1 is assigned to Thursday.
- Pattern # 1 is assigned to Friday.
- Pattern # 1 is assigned to Saturday.
- Pattern # 1 is assigned to Sunday.

Link Data Constants - (Variable data in *.LNK file)

LINK DESCRIPTION	* X1	LINK COORDINATES (M)	X2	Y2	* LENGTH (M)	BRG (DEG)	TYPE	H (M)	W (M)	NLANES
1. EB Link 1	* 634738.1	*****	634889.2	*****	151.	90.	FL	7.9	20.7	
2. EB Link 2	* 634889.2	*****	634967.1	*****	78.	90.	FL	7.9	20.7	
3. EB Link 3	* 634967.1	*****	635029.6	*****	63.	86.	FL	8.8	20.7	
4. EB Link 4	* 635029.6	*****	635092.3	*****	64.	79.	FL	9.7	20.7	
5. EB Link 5	* 635092.3	*****	635209.1	*****	118.	83.	FL	9.7	20.7	
6. EB Link 6	* 635209.1	*****	635305.2	*****	99.	77.	FL	8.8	20.7	
7. EB Link 7	* 635305.2	*****	635386.1	*****	83.	77.	FL	7.9	20.7	

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

PAGE: 2

CAL3QHCR (Dated: 04244)

DATE : 10/16/ 7
TIME : 11:42:22

JOB: 4111 RIO LINDA BLVD SACRAMENTO RUN: I-80 AT RIO LINDA BLVD IN SACRAMENTO

Link Data Constants - (Variable data in *.LNK file)

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (M)	BRG TYPE	H (M)	W	NLANES
8. WB Link 1	635388.2	635297.5	635297.5	635297.5	94.	255. FL	7.9	20.7	
9. WB Link 2	635297.5	635198.4	635198.4	635198.4	101.	258. FL	8.8	20.7	
10. WB Link 3	635198.4	635089.9	635089.9	635089.9	110.	261. FL	9.7	20.7	
11. WB Link 4	635089.9	635028.8	635028.8	635028.8	62.	260. FL	9.7	20.7	
12. WB Link 5	635028.8	634954.9	634954.9	634954.9	74.	267. FL	8.8	20.7	
13. WB Link 6	634954.9	634884.7	634884.7	634884.7	70.	270. FL	7.9	20.7	
14. WB Link 7	634884.7	634738.6	634738.6	634738.6	146.	270. FL	7.9	20.7	

Receptor Data

RECEPTOR	X	Y	Z
1. REC 1	634900.3	634900.3	1.8
2. REC 2	634959.4	634959.4	1.8
3. REC 3	635014.5	635014.5	1.8
4. REC 4	635074.4	635074.4	1.8
5. REC 5	634907.2	634907.2	1.8
6. REC 6	634956.2	634956.2	1.8
7. REC 7	635027.0	635027.0	1.8

Model Results

Remarks : In search of the wind direction corresponding to the maximum concentration, only the first direction, of the directions with the same maximum concentrations, is indicated as the maximum.

* MAXIMUM HOURLY CONCENTRATIONS WITH ANY AMBIENT BACKGROUND CONCENTRATIONS (BKG) ADDED

	REC1	REC2	REC3	REC4	REC5	REC6	REC7
MAX+BKG *	1.5	1.4	1.5	1.5	0.9	0.9	0.9
- BKG *	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	1.5	1.4	1.5	1.5	0.9	0.9	0.9
WIND DIR*	178	108	108	108	178	178	178
JULIAN *	2	33	33	33	2	2	2
HOURLY *	17	17	17	17	17	17	17

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

CAL3QHCR (Dated: 04244)

PAGE: 4

DATE : 10/16/ 7
TIME : 11:42:28

JOB: 4111 RIO LINDA BLVD SACRAMENTO
RUN: I-80 AT RIO LINDA BLVD IN SACRAMENTO

=====
Output Section
=====

NOTES PERTAINING TO THE REPORT

1. THE HIGHEST AVERAGE IN EACH OF THE FIRST TWO COLUMNS OF EACH TABLE BELOW ARE SUFFIXED BY AN ASTERISK (*). FOR PM OUTPUT, THERE IS ONLY ONE COLUMN AND ASTERISK FOR THE ANNUAL AVERAGE/PERIOD OF CONCERN TABLE.
2. THE NUMBERS IN PARENTHESES ARE THE JULIAN DAY AND ENDING HOUR FOR THE PRECEDING AVERAGE.
3. THE NUMBER OF CALM HOURS USED IN PRODUCING EACH AVERAGE ARE PREFIXED BY A C.

PRIMARY AND SECONDARY AVERAGES.

FIVE HIGHEST 24-HOUR END-TO-END AVERAGE CONCENTRATIONS IN MICROGRAMS/M**3 INCLUDING AMBIENT BACKGROUND CONCENTRATIONS.

Reptr No.	Highest Ending		Second Highest Ending		Third Highest Ending		Fourth Highest Ending		Fifth Highest Ending	
	Conc	Day Hr	Conc	Day Hr	Conc	Day Hr	Conc	Day Hr	Conc	Day Hr
1	0.61*	(310,24) C 7	0.49*	(33,24) C 5	0.49	(302,24) C 4	0.46	(5,24) C 5	0.45	(250,24) C 7
2	0.57	(310,24) C 7	0.47	(33,24) C 5	0.45	(302,24) C 4	0.43	(27,24) C 6	0.42	(5,24) C 5
3	0.55	(310,24) C 7	0.47	(33,24) C 5	0.42	(27,24) C 6	0.42	(5,24) C 5	0.42	(348,24) C 4
4	0.58	(310,24) C 7	0.47	(33,24) C 5	0.44	(302,24) C 4	0.43	(27,24) C 6	0.43	(338,24) C 8
5	0.33	(310,24) C 7	0.25	(302,24) C 4	0.24	(33,24) C 5	0.24	(5,24) C 5	0.24	(348,24) C 4
6	0.32	(310,24) C 7	0.26	(33,24) C 5	0.25	(302,24) C 4	0.25	(348,24) C 4	0.24	(5,24) C 5
7	0.33	(310,24) C 7	0.28	(302,24) C 4	0.28	(348,24) C 4	0.27	(33,24) C 5	0.26	(5,24) C 5

THE HIGHEST ANNUAL AVERAGE CONCENTRATIONS
IN MICROGRAMS/M**3

INCLUDING AMBIENT BACKGROUND CONCENTRATIONS.

Receptor Number	Maximum Ending	
	Conc	Day Hr
1	0.21*	(365,24) C1887
2	0.20	(365,24) C1887
3	0.19	(365,24) C1887
4	0.19	(365,24) C1887
5	0.10	(365,24) C1887
6	0.10	(365,24) C1887
7	0.10	(365,24) C1887

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

PAGE: 5

CAL3QHCR (Dated: 04244)

DATE : 10/16/ 7
TIME : 11:42:28

JOB: 4111 RIO LINDA BLVD SACRAMENTO RUN: I-80 AT RIO LINDA BLVD IN SACRAMENTO

LINK CONTRIBUTION TABLES

MAXIMUM 24-HOUR AVERAGED LINK CONTRIBUTIONS
IN MICROGRAMS/M**3
INCLUDING AMBIENT BACKGROUND CONCENTRATIONS.

Reptr No.	Total Conc	Ambient Day Hr	Total Backgnd	Link +1	Link +2	Link +3	Link +4	Link +5	Link +6	Link +7	Link +8	Link +9	Link +10
1	0.61	(310,24)	0.00	0.61	0.12	0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00
			Links 10+	0.00	0.02	0.22	0.14	0.00	0.00	0.00	0.00	0.00	0.00
2	0.57	(310,24)	0.00	0.57	0.03	0.13	0.06	0.02	0.00	0.00	0.00	0.00	0.00
			Links 10+	0.01	0.14	0.15	0.04	0.00	0.00	0.00	0.00	0.00	0.00
3	0.55	(310,24)	0.00	0.55	0.02	0.03	0.11	0.06	0.02	0.00	0.00	0.00	0.01
			Links 10+	0.07	0.19	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00
4	0.58	(310,24)	0.00	0.58	0.02	0.02	0.04	0.12	0.06	0.00	0.00	0.00	0.08
			Links 10+	0.19	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00
5	0.33	(310,24)	0.00	0.33	0.08	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00
			Links 10+	0.01	0.03	0.06	0.07	0.00	0.00	0.00	0.00	0.00	0.00
6	0.32	(310,24)	0.00	0.32	0.02	0.07	0.03	0.02	0.01	0.00	0.00	0.00	0.01
			Links 10+	0.02	0.05	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00
7	0.33	(310,24)	0.00	0.33	0.02	0.02	0.05	0.03	0.02	0.00	0.00	0.00	0.03
			Links 10+	0.04	0.08	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00

SECOND HIGHEST 24-HOUR AVERAGED LINK CONTRIBUTIONS
IN MICROGRAMS/M**3
INCLUDING AMBIENT BACKGROUND CONCENTRATIONS.

Reptr No.	Total Conc	Ambient Day Hr	Total Backgnd	Link +1	Link +2	Link +3	Link +4	Link +5	Link +6	Link +7	Link +8	Link +9	Link +10
1	0.49	(33,24)	0.00	0.49	0.00	0.06	0.07	0.03	0.03	0.01	0.00	0.00	0.01
			Links 10+	0.03	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.47	(33,24)	0.00	0.47	0.00	0.00	0.06	0.08	0.05	0.01	0.00	0.01	0.04
			Links 10+	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.47	(33,24)	0.00	0.47	0.00	0.00	0.00	0.07	0.11	0.03	0.01	0.01	0.11
			Links 10+	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.47	(33,24)	0.00	0.47	0.00	0.00	0.00	0.00	0.14	0.04	0.01	0.04	0.23
			Links 10+	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.25	(302,24)	0.00	0.25	0.05	0.04	0.02	0.00	0.01	0.00	0.00	0.00	0.01
			Links 10+	0.01	0.02	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00
6	0.26	(33,24)	0.00	0.26	0.00	0.00	0.01	0.04	0.03	0.02	0.01	0.02	0.06
			Links 10+	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.28	(302,24)	0.00	0.29	0.02	0.03	0.04	0.03	0.03	0.01	0.00	0.00	0.03
			Links 10+	0.04	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

CAL3QHCR (Dated: 04244) PAGE: 7

DATE : 10/16/ 7 TIME : 11:42:28 JOB: 4111 RIO LINDA BLVD SACRAMENTO RUN: I-80 AT RIO LINDA BLVD IN SACRAMENTO

CALM DURATION FREQUENCY (Julian day/hour ending) of Significant Occurrences

Table with 3 columns: Hours of Consecutive Calm Winds, Frequency of Occurrence, and Julian day/hour ending. It lists significant occurrences for 290 and 116 hours of calm winds.



Attachment E
Noise
Measurement
Site Plan

INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

Appendix D-1

Insertion Loss Calculation Spreadsheet
Infinite Barrier

Attachment F
Inputs & Results
of Noise Barrier
Analysis

Job Number : 2007-096
Description: Lot 21
Source Noise Level (dBA): 67
Source Frequency (Hz): 500
Source Height (ft): 30
Receiver Height (ft): 5
C1 (Source to Barrier Distance (ft)): 275
C2 (Barrier to Receiver Distance (ft)): 25
Range of Barrier Heights
From (ft): 6
To (ft): 16

Barrier Heights (ft)	Insertion Loss (dB)	Noise Level (dB)
6	-4.6	62.4
7	-4.9	62.1
8	-5.1	61.9
9	-5.6	61.4
10	-6.6	60.4
11	-7.5	59.6
12	-8.3	58.8
13	-9.2	57.8
14	-9.8	57.2
15	-10.7	56.3
16	-11.2	55.8



INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

Appendix D-2

Insertion Loss Calculation Spreadsheet
Infinite Barrier

Job Number : 2007-096
 Description: Lots 22-32
 Source Noise Level (dBA): 68
 Source Frequency (Hz): 500
 Source Height (ft): 30
 Receiver Height (ft): 5
 C1 (Source to Barrier Distance (ft)): 275
 C2 (Barrier to Receiver Distance (ft)): 135
 Range of Barrier Heights
 From (ft): 6
 To (ft): 16

Barrier Heights (ft)	Insertion Loss (dB)	Noise Level (dB)
6	-0.9	67.1
7	-1.4	66.6
8	-2.9	65.1
9	-3.8	64.2
10	-4.2	63.8
11	-4.6	63.4
12	-4.9	63.1
13	-4.9	63.1
14	-5.0	63.0
15	-5.1	62.9
16	-5.3	62.7



INITIAL STUDY (Revised 3/21/08)/MITIGATED NEGATIVE DECLARATION

Appendix D-3

Insertion Loss Calculation Spreadsheet
Infinite Barrier

Job Number : 2007-096
 Description: Lot 33
 Source Noise Level (dBA): 69
 Source Frequency (Hz): 500
 Source Height (ft): 30
 Receiver Height (ft): 5
 C1 (Source to Barrier Distance (ft)): 275
 C2 (Barrier to Receiver Distance (ft)): 95
 Range of Barrier Heights
 From (ft): 6
 To (ft): 16

Barrier Heights (ft)	Insertion Loss (dB)	Noise Level (dB)
6	-1.4	67.6
7	-2.9	66.1
8	-3.9	65.1
9	-4.5	64.5
10	-4.8	64.2
11	-4.9	64.1
12	-5.0	64.0
13	-5.1	63.9
14	-5.4	63.6
15	-5.7	63.3
16	-6.3	62.7

