

DEVELOPMENT SERVICES DEPARTMENT

## **CITY OF SACRAMENTO**

CALIFORNIA

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ENVIRONMENTAL PLANNING SERVICES 916-808-5842 FAX 916-264-5328

JUNE 22, 2005

TO:

Interested Persons

FROM:

Scott Johnson, Assistant Planner

SUBJECT:

NOTICE OF AVAILABILITY - DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE RIVER

OAKS PROJECT (P01-132)

PROJECT LOCATION: The project site consists of 80.33± vacant acres and is located in the City of Sacramento's South Natomas Community in Sacramento County, California. The project site is located on parcels of land bounded by Interstate Highway 80 to the north, West El Camino Avenue to the south, the Natomas Main Drainage Canal to the east, and Orchard Lane to the west. The project site is comprised of Assessor Parcels Numbers (APN) 225-0220-030, -066, -068, -071, -086, -087, -088, and -089.

COMMENT PERIOD: June 24, 2005 to August 8, 2005 (Comment Period Ends - 5:00 p.m. August 8, 2005)

The City of Sacramento, Development Services Department, Environmental Planning Services has completed a Draft Environmental Impact Report for the River Oaks (P01-132) project. The document is now available for public review and comment. You may obtain a copy of the document at 1231 I Street, Room 300, Sacramento, California 95814.

The proposed project consists of entitlements to allow for the development of 642± single-family homes. The project proposes to rezone the site from the current Agricultural (A) and Agricultural Planned Unit Development (A-PUD) zones to Single Family Alternate Planned Unit Development (R1-A PUD) in order to allow for the construction of single-family homes. The project also proposes to construct support infrastructure, a community recreation center, ±9.27-acres of parkland, and a trail along the Natomas Main Drainage Canal.

The issues discussed within the EIR are those that have been identified within the Initial Study as having potentially significant impacts including: Traffic and Circulation. Mitigation is included in the EIR to reduce most impacts to less-than-significant levels.

The Draft EIR is being circulated for a 45-day public review period from Friday, June 24, 2005 through Monday, August 8, 2005. Written comments regarding the Draft EIR should be received by Environmental Planning Services NO LATER THAN 5:00 P.M., Monday, August 8, 2005. Written comments should be submitted to:

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The Draft EIR has been forwarded to the City Central Library. If you have any questions concerning the environmental review process, please call Scott Johnson, Assistant Planner at (916) 808-5842. Thank you.

# River Oaks Park

# Draft Environmental Impact Report SCH#2004122052

Lead Agency:
City of Sacramento
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June 2005

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# **CHAPTER 1**

**INTRODUCTION** 

#### CHAPTER 1 INTRODUCTION

This Draft Environmental Impact Report (EIR) is a focused EIR that provides an assessment of the traffic impacts that could reasonably be expected from construction and implementation of the proposed River Oaks Park residential subdivision project. The analysis was prepared by the Development Engineering & Finance Division of the City's Development Services Department, based on a September 2004 traffic study by Dowling & Associates.

The remaining environmental issue areas are addressed in the Initial Study, which is included as *Appendix D* of this EIR. A complete discussion of the CEQA process and the City's decision to prepare a focused EIR is provided in Section 1.2 below.

The proposed project involves the development of an ±80.33-acre parcel in the South Natomas Community of the City of Sacramento with 642 single-family homes. The project includes a request to rezone the site from the current Agricultural (A) and Agricultural Planned Unit Development (A-PUD) zones to Single Family Alternate Planned Unit Development (R1-A-PUD) in order to allow for the construction of the project. The project also includes the construction of roads, a private community recreation center, supporting infrastructure, ±11.06-acres of parkland, a trail, and a pedestrian bridge along the Natomas Main Drainage Canal.

#### 1.1 Purpose

The California Environmental Quality Act (CEQA) requires that projects be evaluated for their possible effects on the environment. The City of Sacramento Development Services Department, as Lead Agency, prepared an Initial Study for the project. The Initial Study concluded that potential impacts related to Traffic and Circulation required an EIR focused on this topic area be prepared prior to any action on the proposed project.

This focused Draft EIR has been prepared in accordance with CEQA (Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (14 California Administrative Code, Section 15000, et seq.). The Draft EIR is an informational document prepared to provide public disclosure of potential impacts of the project. As Lead Agency, the City "is responsible for the adequacy and objectivity of the draft EIR" [CEQA Guidelines, 15084(e)]. It is not intended to serve as a recommendation for either approval or denial of the project.

An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effect of the project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency. [CEQA Guidelines, Section 15121(a)]

The proposed River Oaks Park project lies within the *South Natomas Community Plan* area (City of Sacramento, 1988a), so it is governed by the goals and policies of that community plan as well as the goals and policies of the *City of Sacramento General Plan* (City of Sacramento, 2002a). Copies of the *South Natomas Community Plan* and accompanying EIR, as well as the *City of Sacramento General Plan* and accompanying EIR, are available from the City of Sacramento Development Services Department at 1231 I Street, Sacramento, California, 95814-2998. In addition, the *City of Sacramento General Plan* and the *South Natomas Community Plan* can be

accessed at http://www.cityofsacramento.org/planning/generalplan/gpdocuments.htm, and the *Sacramento City Code*, *Title 17 Zoning* (City of Sacramento, 2003) can be accessed at http://www.cityofsacramento.org/planning/citycode.htm.

#### 1.2 CEQA PROCESS

#### **CEQA Statute**

The California Environmental Quality Act was adopted in 1970 with the goal of protecting the environment.

It is the intent of the Legislature that all agencies of the state government which regulate activities of private individuals, corporations, and public agencies which are found to affect the quality of the environment, shall regulate such activities so that major consideration is given to preventing environmental damage, while providing a decent home and satisfying living environment for every Californian. [CEQA Statutes, Section 21000(g)]

This legislative intent is met through the preparation of comprehensive, multi-disciplinary analyses of environmental impacts. The analyses are intended to disclose to decision makers and the public regarding the potentially significant impacts to the environment of proposed activities and to identify feasible alternatives and mitigation measures to avoid or reduce project impacts. Section 21002 of the CEQA Statutes requires that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental impacts of such projects."

#### **CEQA Guidelines**

In addition to the requirements expressed in the CEQA Statutes, the State Office of Planning and Research (OPR) developed the CEQA Guidelines (Guidelines) to provide guidance to public agencies in the appropriate implementation of the CEQA Statutes. The Guidelines were adopted by the State Resources Agency at the direction of the Legislature, as expressed in Section 21083 of the CEQA Statutes. They are updated regularly in response to legislative amendments to the CEQA Statutes and changes in interpretations of CEQA based on judicial decisions. The Guidelines serve both advisory and regulatory roles. Some provisions express mandatory requirements, while some are advisory and open to interpretation.

#### **CEQA Implementation**

CEQA applies to all discretionary activities of public agencies. A discretionary activity is one in which the public agency has the authority to approve or deny issuance of permits or project approvals. Section 15002(i) of the Guidelines defines a discretionary action as one in which "a governmental agency can use its judgment in deciding whether and how to carry out or approve a project." In formulating the decisions of "whether and how" to act, the public agency must adhere to the CEQA requirements for evaluating the potential environmental impacts of the action.

A primary goal of CEQA is to inform decision makers and the public of the potential environmental impacts of discretionary actions, and to disclose to the public the reasoning used by the agency to reach their decision. To facilitate this disclosure, both the CEQA Statutes and Guidelines establish requirements for public notice and review of CEQA documents. CEQA

Statute Section 21105 requires that EIRs be available for review and/or purchase by any member of the general public, while Sections 15082, 15083, and 15087 of the Guidelines establish requirements for providing members of the general public with opportunities to review and comment on the scope and content of an EIR.

#### Initial Study

CEQA requires that public agencies establish standards and procedures by which the required environmental review of their actions will be conducted. The City of Sacramento uses an Environmental Checklist and Discussion form to provide the first level of environmental information and facilitate completion of the Initial Study, which is based on the Environmental Checklist Form found in Appendix G of the CEQA Guidelines. An Initial Study for the proposed River Oaks Park project was prepared in December 2004, and is provided in this document as *Appendix C*.

According to CEQA Guidelines 15063(c)(3) one of the purposes of the Initial Study is to assist in the preparation of the EIR, if one is required, by focusing the EIR on the effects determined to be significant. The Initial Study must identify the effects determined not to be significant, and explain the reasons for those determinations.

#### Decision to Prepare an Environmental Impact Report

CEQA Guidelines Section 15063(b)(1) requires that upon viewing the results of a project Initial Study, "If the agency determines that there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the Lead Agency" shall prepare an EIR or rely upon the analysis in an prior EIR that adequately addresses the project at hand. In addition, Section 15064(a)(1) requires "If there is substantial evidence in light of the whole record before a lead agency, that a project may have a significant effect on the environment, the lead agency shall prepare a draft EIR."

When the Initial Study identifies a potentially significant environmental impact of a proposed project or action, a Notice of Preparation (NOP) of an EIR is prepared pursuant to Section 15082 of the Guidelines. The NOP, which includes a description of the project and its probable environmental effects, is circulated to the public and to other agencies that may have jurisdiction over some aspect of the project or the resources that would be affected by the project. Typically, the Initial Study, or a summary of its contents is included in the NOP. The public and agencies are thus provided the opportunity to comment on the scope and content of the EIR. Section 15084(c) of the Guidelines requires that "the Lead Agency must consider all information and comments received" from the general public and from other agencies. An NOP for the proposed project was circulated in December 2004 and January 2005. The NOP is provided in *Appendix A* of this EIR, and the comments received on the NOP are provided in *Appendix B*.

Preparation of the EIR proceeds upon circulation of the NOP. The contents of the EIR are governed by Sections 21100 and 21100.1 of the CEQA Statutes and by Sections 15120 through 15132 of the Guidelines. In short, the EIR must present a description of the proposed project and the existing environmental setting of the project area; evaluation of the potential environmental impacts of the project, including cumulative impacts in the project vicinity; and

consideration of mitigation measures and alternatives to the project that could avoid or reduce those impacts. The Draft EIR must be circulated for public and agency review prior to the Lead Agency adopting a decision on the project, as stipulated in Section 15087 of the Guidelines.

Comments received during the public review period for the Draft EIR must be considered by the Lead Agency and a Response to Comments must be prepared for consideration by the decision making body. The Response to Comments becomes a part of the Final EIR, which may also include revisions to the text of the Draft EIR. There is no requirement for a formal public circulation and review period for the Final EIR. CEQA Statute Section 21105 requires that EIRs be available for review and/or purchase by any member of the general public, while Sections 15082, 15083, and 15087 of the Guidelines establish requirements for providing members of the general public with opportunities to review and comment on the scope and content of an EIR.

#### 1.3 Type and Purpose of the EIR

Guidelines Section 15161 defines a **project EIR** as one that "examines the environmental impacts of a specific development project," while a **program EIR** is intended to provide a broad and general analysis of environmental effects resulting from "a series of actions that can be characterized as one large project" [Guidelines Section 15168(a)]. This EIR evaluates the environmental effects of the proposed project, which consists of construction of a residential development. Therefore this EIR is a Project EIR, which provides analysis of the specific impacts related to the proposed actions of the project. This EIR addresses the ttransportation and circulation impacts and identifies necessary mitigation measures, where feasible. Other potentially significant impacts were addressed and mitigated in the Initial Study.

#### 1.4 MITIGATION MONITORING AND REPORTING PROGRAM

A Mitigation Monitoring and Reporting Program (MMRP) has been prepared in accordance with Section 21081.6 of the Public Resources Code and is included in this EIR. The MMRP describes the implementation program for mitigation measures included in this EIR to avoid impacts or reduce them to less than significant levels. The mitigation measures shall be included in the conditions of approval for this project. The City monitors compliance with conditions of approval through a variety of permit processes as listed below.

- Planning Commission Approval
- Improvement Plan Approval
- Encroachment Permit
- Building Permit Approval
- © Certification of Occupancy

The issuance of permits or the approval of improvement plans must be preceded by verification from City staff that certain conditions of approval/mitigation measures have been met. The issuance of any of the listed City approvals or permits shall serve as the necessary monitoring of those conditions of approval/mitigation measures that are identified as prerequisites for the listed approvals and permits.

#### 1.5 Focus

The focus of this project EIR, as provided for in the Guidelines, is limited to those specific issues and concerns identified by the City of Sacramento as being potentially significant. The City of Sacramento Development Services Department prepared a Notice of Preparation (NOP) of an EIR, which provided a general description of the project and a preliminary evaluation of possible environmental impacts resulting from implementation of the proposed River Oaks Park project. The NOP was circulated in December 2004 and January 2005 to State agencies (via the State Clearinghouse) and local agencies and organizations.

Comments on the NOP were received from the California Department of Transportation (Caltrans), the California Department of Water Resources, the River Oaks Community Association (ROCA), the South Natomas Transportation Management Association, the Sacramento Metropolitan Air Quality Management District, the County Sanitation District-1 (CSD-1), and WELCAM 80 Venture. All NOP comment letters are included in *Appendix B*.

The comments received during the NOP review period served to further refine the Initial Study and focus the EIR. As noted in the Initial Study that accompanied the NOP to the State Clearinghouse, the proposed project is expected to result in potentially significant impacts in the following environmental resource area:

#### Traffic and Circulation

The development of the proposed project would increase vehicular traffic on the roadway network within the project area. The project-generated traffic is expected to create potentially significant traffic impacts to some of the project area intersections and roadway segments. Chapter 4, Environmental Setting, Impacts & Mitigation Measures – Traffic and Circulation, contains a technical analysis prepared by the City of Sacramento and Dowling and Associates that examines in detail the project-related impacts to the transportation system. This chapter also provides mitigation measures and an analysis of project alternatives. Based on the review of the baseline operating traffic conditions within the project area and the capacity of the project area roadway system it appears that some of the potential traffic impacts of the proposed project may be significant and unavoidable as per the City's standards of significance for traffic impacts.

#### Issues Excluded from the EIR

In accordance with Guidelines Section 15128, the analysis in the Initial Study determined that the project does not have the potential to result in significant impacts to several environmental resource areas, and that the potentially significant impacts in other environmental resource areas would be mitigated to less than significant levels.

#### **Less Than Significant Impacts**

The Initial Study has determined that the project will have a less-than-significant impact on the following issue areas:

#### Land Use and Agriculture

Until 2004 the site was used for agricultural crops, retail produce sales, and a single-family home. Currently, the project site is vacant. The proposed project will construct housing, parkland, a recreation center, roads, two pedestrian and bicycle bridges, and a pedestrian/bike

trail. The project will also construct water, sewer, electrical, telephone, cable infrastructure, and roads to serve the project. The project would completely change the physical use at the site by replacing the agricultural use at the site with a residential community with parks and trails.

California law requires the Community Plan and Zoning designations to be consistent with the General Plan. The project proposes that the zoning designations be amended from the existing agricultural district designations to residential designations consistent with the adopted *City of Sacramento General Plan* and *South Natomas Community Plan* (SNCP). While agricultural use at the site is consistent with the agricultural zoning districts currently in place, the zoning has not been amended to reflect land use designations for the site as shown in the more recently adopted (1988) SNCP or the General Plan. Both of these plans call for development of the site with residential uses.

The proposed project would convert this prime farmland to non-agricultural residential and related uses. Impacts to prime farmland associated with the proposed project fall within the scope of the Statement of Overriding Considerations prepared for the Sacramento General Plan Update Environmental Impact Report.

Since the project site has been identified in the City General Plan and the Community Plan for conversion to residential use and the Statement of Overriding Considerations regarding the conversion of prime farmland adopted by the City pursuant to CEQA, the project will have a less-than-significant effect on prime farmland.

### Population and Housing

While the proposed project would accommodate over half of the remaining SNCP buildout population, this growth is consistent with that called for in the Community Plan. Therefore, the growth induced by the project is within the population projection thresholds identified in the SNCP and will have a less-than-significant growth inducing effect.

The project will not displace residents in affordable housing units or divide an established community and, therefore, will have a less-than-significant effect on affordable housing.

#### **Less than Significant Impact with Mitigation**

The Initial Study has determined that, with mitigation, the project will have a less-than-significant impact on the following issue areas:

#### Seismic Hazards, Geology, and Soils

Mitigation measures implemented as conditions of project approval require the project to adhere to the Uniform Building Code (UBC) and City standards for construction in areas subject to seismic hazards. Title 15 of the *Sacramento City Code* also requires implementation of the State and federal earthquake protection standards during building construction. The City implements these policies through the building permit process for new construction projects. Enforcement of the UBC and Title 15 through the building permit process will reduce potential impacts from seismic hazards to less-than-significant levels.

Mitigation measures will also require the preparation of a geotechnical report, grading plan, and groundwater use feasibility study ensuring the project meets UBC standards and Title 15 standards for soils preparation and grading of the project site prior to construction reducing the

potential for erosion and unstable soil conditions at the project site to less-than-significant levels.

## Hydrology and Water Quality

Mitigation measures implemented as conditions of project approval will reduce the potential impacts of the project on surface and groundwater quality and exposure of persons to increased danger from flooding to less-than-significant levels. The project will be required to follow the City of Sacramento Department of Utilities guidelines for stormdrain system and stormwater detention basin construction for the proposed onsite detention basin. The applicant shall submit a preliminary drainage plan which contains Best Management Practices (BMP) and incorporates Best Available Control Technology (BACT) meeting Department of Utilities' standards prior to construction. The project will also be required to comply with the City's Stormwater Management and Discharge Control Ordinance, reducing potential storm water pollution and reducing runoff into the City's stormwater drainage system. Mitigations include a proposed water detention basin, which will delay storm water from leaving the project site, thereby reducing instances of offsite flooding, and preventing materials suspended in storm water to enter offsite drainages. Recent upgrades to the regional levee system provide the project site with protection from a 100-year flood event. Since the site is protected by levees from a 100-year or greater flood event, impacts from flooding are expected to be less than significant.

The project will also be required to comply with the State National Pollution Discharge Elimination System (NPDES) general permit. To comply with the State Permit, the applicant will file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) and prepare a Storm Water Pollution Prevention Plan (SWPPP) prior to construction. The SWRCB will approve the SWPPP providing it contains features designed to minimize construction related impacts to surface water and groundwater. Preparation and SWRCB approval of the SWPPP will ensure that surface water quality is not adversely affected by implementation of the project.

Mitigation measures will ensure groundwater use at the site will not excessively draw down groundwater, or that excavation during construction will not be at depths which could block or alter the direction or rate of flow of groundwater. The cuts and excavations necessary for placement of infrastructure to serve the project site are temporary, of limited depth, and will be replaced with engineered fill. Therefore construction activity would have less-than-significant effects on groundwater.

Mitigation measures prohibit the project's proposed construction of trail and bridge facilities along the Canal's levee from occurring within the Canal bed, thereby avoiding a change in currents, or impeding the movement of water. Mitigation requires the applicant to obtain a Streambed Alteration Agreement permit from the California Department of Fish and Game prior to construction of trails and bridge foundations on the Canal levee.

#### Air Quality

Construction of the project would generate air pollutants, such as dust emissions during grading; exhaust emissions from construction equipment, and off-gassing of pollutants from paving and application of paints and other architectural coatings. Residential activity and

vehicle use will create long-term operational emissions at the site. The Sacramento Metropolitan Air Quality Management District (SMAQMD), who has jurisdiction over the project air basin, has determined that mitigation measures implemented as conditions of project approval will reduce the project's air quality impact to less-than-significant levels through a combination of emissions reduction measures which are implemented in the project's design and the applicant's payment of fees used to purchase emissions reduction equipment for vehicle retrofitting in the Air District. The project is given credit for features which may by design reduce the emission of air pollutants. The project features and air district credits applied to the River Oaks Park project are listed below:

- Sidewalks/Paths Most Destinations Covered: for project pedestrian walkways;
- Street Trees Provide Shade Moderate Coverage;
- Pedestrian Circulation Access Some Destinations;
- Visually Interesting Uses Some Uses within Walking Distance;
- Pedestrian Safety from Crime Some Degree of Safety;
- Transit Service 31-60 Minute Bus within ¼ mile;
- Interconnected Bikeways Low Coverage;
- Bike Routes Provide Paved Shoulders Few Routes;
- Safe Vehicle Speed Limits Few Destinations;
- Uses within Cycling Distance Some Uses;
- Project Provides Sidewalks and Pedestrian Paths;
- Project Provides Bike Lanes/Paths.

The project will be designed to provide access to the bicycle paths and project features, such as sound walls, will be designed to allow pedestrian and bicycle traffic to flow smoothly. SMAQMD encourages an applicant to incorporate as many feasible mitigation measures into the project as possible in order to substantially lessen or avoid significant air quality impacts. The default emission reduction factors are additive and can be combined in most cases. The SMAQMD assessed the project proposal and determined the number of credits the proposed project received for each design feature.

#### **Biological Resources**

North Fork Associates biologists conducted a biological resource assessment of the site, including the area along the Natomas Main Drainage Canal (Canal), to identify and map plant communities and wildlife, jurisdictional waters of the United States, and special-status plant and wildlife species, including any habitat present within the project area. In addition, adjacent properties, although not walked, were scanned with binoculars for the presence of wildlife species that could be impacted by proposed activities on the site. The wetland delineation found no Waters of the U.S. on the project site and was verified by the U.S. Army Corps of Engineers. A certified arborist assessed the project site trees. Three subsequent surveys of the site were conducted to assess potential project related impacts from the widening of West El Camino Boulevard and for four (4) potential pedestrian bridge alignments crossing the Canal.

Although the biological surveys did not detect the presence of special status species, including any new Swainson's hawk nesting sites at the project site (documented nesting sites adjacent to the project site include: NB-1 located west of Orchard Road, and NB-25 adjacent to the Canal), queries of various special status species databases indicate 14 plant and 57 animal special status species could occur within the project vicinity (an approximately 500 square mile area). However, only 19 of these special status species were determined to have any potential to occur on or use the project site. Of these 19 species, the Swainson's hawk could potentially use the property for foraging and the valley elderberry longhorn beetle, giant garter snake, and/or the northwestern pond turtle could occur in the Canal or riparian zone adjacent to the property. The other 15 species were determined by the biological surveys to either have no potential for occurrence or be unlikely to occur do to unsuitable habitat on the property.

The project site is also located in the Natomas Basin Habitat Conservation Plan (NBHCP) area. The 1994 North Natomas Community Plan required the development and implementation of the NBHCP as mitigation for development in North Natomas and the Natomas Basin, which includes portions of land in South Natomas as well (including the project site). Any development on the River Oaks property will be subject to the plan's conditions and fees. The NBHCP is a conservation plan supporting application for incidental take permits (ITPs) under Section 10(a)(1)(B) of the Endangered Species Act (ESA) and under Section 2081 of the California Fish and Game Code. The ESA, under Section 9, prohibits the take of any fish or wildlife species listed as endangered or threatened, including the destruction of habitat that prevents the species' recovery.

The NBHCP establishes a multi-species conservation program to minimize and mitigate the expected loss of habitat values and incidental takes of Covered Species that would result from urban development. The NBHCP requires that the project comply with all the measures in the NBHCP including payment of mitigation fees and compliance with applicable avoidance, minimization, and mitigation measures. Mitigation measures that apply to the project require pre-construction nesting raptor surveys, payment of NBHCP fees, specific mitigations to reduce potential take, and a grading plan that would comply with the requirements of the NBHCP and to mitigate impacts to Swainson's hawk, giant garter snake, and northwestern pond turtle to less-than-significant levels.

Since raptors, including relatively common species, and their nests, are protected pursuant to the California Fish and Game Code (Section 3503.5) and the federal Migratory Bird Treaty Act of 1918, a mitigation measure requiring pre-construction nest surveys to reduce potential impacts to raptors to less than significant levels is required of the project applicant.

The project is required to adhere to the City of Sacramento Heritage Tree Ordinance by obtaining a permit and adhering to the mitigation requirements of the ordinance and the City Arborist prior to cutting down trees at the project site. The project will therefore have a less-than-significant effect on heritage trees.

The U.S. Army Corps of Engineers jurisdiction for waters of the United States is within the ordinary high water mark in the Canal, and the Department of Fish and Game's jurisdiction under Sections 1600-1616 of the Fish and Game Code extends to the edge of the riparian vegetation. Since the project proposes to place a pedestrian bridge on the Canal levees, the applicant will be required to obtain a Section 1602 Streambed Alteration Agreement from the

Department of Fish and Game in order to mitigate impacts on the riparian vegetation to less-than-significant levels as identified in an addendum to the arborist's report. The riparian vegetation within the area of the first of two proposed pedestrian bridge alignments consists mainly of Himalayan blackberry along with two dying walnut trees. A second pedestrian bridge alignment will be selected for the project site from three alternatives that were evaluated in a biological resource assessment prepared on February 11, 2005. The assessment identifies protective measures that shall be implemented to reduce the potential for disturbance of biological resources at each of the alternative alignments to less-than-significant.

#### Energy

Mitigation measures implemented as conditions of approval require the project to comply with State Title 24 Energy Efficiency Standards in construction and to implement SMUD conservation measures. Conservation measures integrated into the project will maximize project related electric power and natural gas efficiency to the extent practicable. The project's impact on energy resources will be less-than-significant with conservation mitigation.

#### Hazards

The project will be required to incorporate mitigation measures implementing federal, State, County, and City regulations to minimize to the potential hazards associated with accidental explosion or release of hazardous substances with implementation of the project. The project will have a less-than-significant effect on the risk of accidental release of hazardous materials and explosion with mitigation incorporated.

The project will be required to submit a Traffic Management Plan and construction timing to the City Department of Emergency Services for review and approval. The project will have a less-than-significant effect on emergency evacuation plans with approval of the traffic management plan and construction timing to ensure the project will not interfere with emergency evacuation plans and City safety regulations.

The potential for hazardous materials to be uncovered during demolition and removal of the existing buildings, foundations, storage containers, equipment, and debris from the site exists. Mitigation requires the project site to be re-inspected for signs of hazardous materials during demolition and removal of debris from the site. Mitigation will ensure the potential for the creation and/or exposure of persons to existing hazards will be less-than-significant.

The City of Sacramento Fire Department requires the project meet the provisions of the fire code during implementation ensuring reduction of flammable materials at the project site, including vegetation, thereby reducing the potential fire related hazards to negligible levels.

#### Noise

An environmental noise assessment technical study was prepared for the project. The existing ambient noise environment in the immediate project vicinity is defined almost exclusively by noise from traffic on Interstate 80 and West El Camino Avenue. Identified potentially significant noise sources associated with this project are project-related construction, increased traffic noise on the local roadway network associated with the more intensive use of the project site, and the effects of Interstate 80 and West El Camino Avenue traffic noise on the proposed residences within the project.

Noise impacts due to project-related traffic increases on the local roadway network and traffic noise levels were predicted at representative distances for both existing and future, project and no-project conditions. Noise impacts were identified at existing noise-sensitive areas when the noise level increases resulting from the project exceed the 4 dB significance threshold or when future traffic noise levels are predicted to exceed 60 dB Ldn at the proposed residential uses within the project site.

To describe existing and projected noise levels due to traffic, the *Federal Highway Administration Highway Traffic Noise Prediction Model* was used by the noise consultant. The model is based upon the *Calveno* reference noise factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. Because the project-generated traffic on both the existing and future roadways would not cause significant traffic noise level increases along the existing roadway network, this impact is considered to be less-than-significant.

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet and are considered potentially significant. Construction activities would be temporary in nature and shall be required as a condition of project approval to occur during normal daytime working hours. In order to reduce construction related noise impacts, the project will be required to comply with *City of Sacramento Noise Ordinance* construction related noise mitigation measures, thereby reducing project construction noise related impacts to less-than-significant levels.

The project proposes to place residences in proximity to both Interstate 80 and West El Camino Avenue. Sound reduction measures including sound walls and sound reducing building materials will be required to be incorporated in the project to reduce post-construction interior and exterior noise levels in the project residences to levels compliant with the City Noise Ordinance. These sound reduction measures are conditions of project approval that will reduce the impacts from adjacent roadways on project residences to less-than-significant levels.

#### **Public Services**

The project will be required to participate in the *South Natomas Public Facilities Financing Plan and Facilities Benefit Assessment*, and is required to pay its fair share of improvements to vicinity roads and public facilities. The project is also subject to participation in its fair share of applicable parks and landscaping districts for maintenance of public facilities. The project site plan and building designs will be required to meet the development standards of the City of Sacramento Fire Department and State Fire Code. Regulations provide for adequate, well-lighted vehicular access, fire suppression infrastructure, and water supply prior to development. The project is expected to have a less-than-significant effect on first responder services with mitigation incorporated.

The Natomas Unified School District calculates that the new development will be home to approximately seventy students for every 100 residential units. The expected student population would be comprised of forty elementary school age students, ten middle school age students, and twenty high school age students in every 100 residences. The existing and

planned for elementary, middle, and high schools have the capacity to serve the students expected to be living at the project site. The project will be required as a condition of development approval to contribute development fees to help fund area schools. Therefore, the project will have a less-than-significant effect on area schools.

The project roads will be paid for and constructed by the developer to City of Sacramento standards. The project is required to pay its share of public facility and road maintenance assessments as conditions of project approval and will therefore have a less-than-significant effect on the maintenance of public facilities and roads.

#### **Utilities**

#### SB 610 Water Assessment and SB 221 Water Supply Verification

The proposed project is subject to the requirements of SB 610 and SB 221. Specifically, it is a proposed residential development of more than 500 dwelling units that will be connected to a public water system. Therefore, a water supply assessment will be prepared prior to certification of the EIR and approval of the project. Based on calculations provided by the City, the proposed project will utilize less than 0.1 percent of the available fresh water capacity, and will be required to implement water conservation measures in construction as conditions of project approval. Therefore, the project will have a less-than-significant impact on water supply.

#### Sewer

The proposed project includes the construction of 642 units and would generate between 151,960 and 203,050 gallons of sewage flow daily. The flow expected from the project is well within the remaining 16 million gallons capacity of the Sacramento Regional County Treatment Plant and will therefore have a less-than-significant impact to wastewater treatment. The project applicant will be required to prepare a sewer study as a condition of project approval. The purpose of the sewage study is to ensure the sewage conveyance system will have the capacity to serve the project site. The project will have a less-than-significant effect on municipal sewer conveyance systems with this mitigation.

#### **Solid Waste**

As a condition of project approval, the project residences will be required to participate in the City's residential trash, recycling, and garden refuse programs. These measures will include recycling of paper, cardboard, plastic, glass, metals, and organic yard materials. The solid waste generated by the project will be minimized by diversion and recycling and will thereby reduce project related impacts to solid waste to less-than-significant levels.

#### Aesthetics, Light, and Glare

The proposed project site is not located in a local or state designated scenic area, or along a designated scenic route or highway. The architecture of the project incorporates decorative features such as cornices, gables, porticos, pilasters, balconies, and distinct window treatments such as shutters and decorative frames. The project incorporates parks and landscaping which utilize trees and shrubbery to improve onsite aesthetic effects. The project will be required to participate in a landscape district, or adopt landscape standards in the project Covenants, Conditions, and Restrictions (CC&Rs). Mitigation measures implemented as conditions of

project approval require shielding from view of outdoor mounted machinery, the use of landscaping and decorative materials to soften the visual impact of sound walls, and be required to comply with light and glare construction standards in the *Sacramento City Code*. The project will have a less-than-significant effect on aesthetics, light, and glare with mitigation incorporated.

#### **Cultural Resources**

The project site is located outside the cultural resources "Primary Impact Areas" as defined by the General Plan. An area west of the project site is identified on the *Sacramento County General Plan* Cultural Resources map as an area of moderate sensitivity for prehistoric and historic resources. Intensive cultivation, grading and other construction activities in the project area have resulted in substantial surface and subsurface disturbance in the project area. However, subsurface resources may potentially exist onsite and may be discovered during construction of the project. Mitigations incorporated as a conditions of project approval require that in the event the project uncovers resources of paleontological, archaeological, historical significance, items of ethnic value, or human remains during construction, work in the area shall stop immediately and a qualified archaeologist and/or a representative of the Native American Heritage Commission be consulted.

A cultural resource assessment of the project site was prepared and includes a review of historic records and a survey of the site. The Canal, which defines the eastern project site boundary, is a contributing component to the National Register-eligible Reclamation District 1000 (RD 1000) Rural Historic Landscape District. The Natomas Company built the RD 1000 in 1911 to open the flood prone American Basin to agricultural and residential use. The Army Corps of Engineers (Corps) and the California Office of Historic Preservation (OHP) determined in 1994 that RD 1000 is eligible for inclusion in the National Register of Historic Places due to its location, materials, and design. The project will be required to avoid altering the structure of the Canal as a condition of project approval. The project will have a less-than-significant impact on cultural resources with mitigation.

#### Recreation

The increase in population at the project site would increase demand for use of area and regional parks facilities. The project includes the development of ±11.06 acres of parks, open space, and recreation related facilities. The project will develop two new parks, one at the northwest corner of the project site, another at the northeast corner. In addition, a linear parkway with a trail will be located between I-80 and the proposed residences. The project will also construct a private recreation center to serve the new community and extend the City's network of bicycle trails along the western project site boundary. Mitigation measures requiring parkland dedications, and/or fees and formation of a parks district in accordance with City regulations ensures the project will have a less-than-significant effect on parks and will increase overall recreational opportunities in the City.

\* \* \* \* \* \*

In view of the findings of the Initial Study and in accordance with the requirements of the California Environmental Quality Act (CEQA), the City has determined a focused environmental impact report (EIR) to be the appropriate environmental document to be

prepared to address the potentially significant impacts of the proposed project on traffic and circulation.

#### 1.6 ORGANIZATION

The Draft EIR text has been organized in conformity with Article 9, Contents of Environmental Impact Reports, Guidelines, Sections 15120 - 15132. The document consists of four principal sections: 1) the Introduction, Project Description, and Executive Summary; 2) the Environmental Analysis; 3) CEQA-mandated discussions of alternatives, growth-inducing impacts, and cumulative impacts; and 4) the Appendices.

Following this Introduction, the Project Description provides an overview of the proposed River Oaks Park Project. The Project Description is followed by the Executive Summary, which provides a brief discussion of significant project impacts and provides a matrix presenting an overview of all project impacts and mitigation measures.

The Environmental Analysis consists of the traffic impact analysis document titled *Report for Traffic Impact Analysis River Oaks, February 7*, 2005. This report provides a comprehensive stand alone technical analysis of the proposed project's potential traffic impacts, a cumulative analysis, and mitigation measures as appropriate.

The remaining chapters of the document include *Chapter 5 CEQA Discussions* (i.e., Growth-Inducing Impacts, Irreversible Environmental Changes, and Cumulative Impacts), *Chapter 6 Alternatives*, the MMRP, and *Chapter 7 Bibliography and References*. The Technical Appendices contain the NOP and technical studies that were prepared to complete this EIR.

#### 1.7 DEFINITION OF TERMS

The EIR will discuss the significance of the project's environmental impacts. The following are definitions of the terms that will be used to denote these impacts:

*No change:* No change in existing conditions is anticipated if the project is implemented.

- *Less than Significant:* No substantial adverse environmental change is anticipated. Mitigation for a less-than-significant impact is usually not necessary.
- **Potentially Significant:** Substantial environmental change may result from implementing the project. Mitigation is proposed to reduce the magnitude of the impact.
- *Significant:* Adverse environmental change is likely to occur. Mitigation is proposed to reduce the magnitude of this impact.
- *Significant and Unavoidable:* Substantial adverse environmental change will occur. This impact cannot be avoided. While the magnitude may be reduced with implementation of mitigation, there is no feasible mitigation that would reduce the impact to a less than significant level.

The EIR includes mitigation measures intended to reduce identified impacts. As discussed in CEQA, Section 15370, these mitigations include:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree of magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating or restoring the impacted environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensation for the impact by replacing or providing substitute resources or environments.

#### 1.8 EIR PREPARATION

Preparation of the Draft EIR was accomplished through various analyses, research, and writing of North Fork Associates staff. *Chapter 4 Environmental Setting, Impacts & Mitigation Measures – Traffic and Circulation* was prepared by Dowling and Associates under the direction of the City of Sacramento. *Chapter 6 Alternatives* was prepared by Dowling and Associates to address any potential traffic-related impacts of the alternative to the proposed project with an introduction by North Fork Associates. Reference materials are listed in *Chapter 7 Bibliography & References*. Additional materials, such as correspondence, the project initial study, Notice of Preparation, technical reports and background information, are included in the Technical Appendices at the end of this EIR.

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# **CHAPTER 2**

PROJECT DESCRIPTION

#### Chapter 2 Project Description

#### 2.1 PROJECT LOCATION

Beazer Homes Inc. is proposing to construct the River Oaks Park subdivision project in the South Natomas Community on an ±80.33-acre site approximately one mile northeast of the Sacramento River in the City of Sacramento, California. The project is located on parcels of land bounded by Interstate 80 to the north, West El Camino Avenue to the south, the Natomas Main Drainage Canal (Canal) to the east, and Orchard Lane to the west. *Figure 2.1 Vicinity and Location Map* shows the location of the proposed project in relation to the Sacramento region.

The site is located in Section 22 of Township 9 north and Range 4 East on the 7 ½-minute Sacramento West USGS quadrangle. The project site is comprised of Assessor Parcels Numbers (APNs) 225-0220-030, -066, -068, -071, -086, -087, -088, and -089 as shown in *Figure 2.2 Assessor's Parcel Map*. The properties are located at an approximate elevation of 15 feet above mean sea level.

#### 2.2 Existing Conditions

#### **Project Site**

The project site lies within the planning areas of the *City of Sacramento General Plan*, the *South Natomas Community Plan*, and the *Natomas Basin Habitat Conservation Plan*. The site is located in an area transitioning from agricultural to urban uses at the northwest edge of the City of Sacramento's South Natomas planning area.

Currently, the project site is comprised of vacant and fallow land, which until recently was the location of a single-family home and farm. A majority of the land at the site was seasonally active with production of a variety of crop types including corn, peppers, tomatoes, and melons. The site was graded and trenched annually for crop irrigation and drainage. The site had several large portable storage containers and sheds located near the residence, which stored vehicles, truck trailers, produce, and equipment. Water and wastewater disposal were provided by a well and septic system located next to the residence. All buildings were removed from the site in summer and fall of 2004.

Two locations where residences formerly existed are clearly marked by trees. The first location is next to West El Camino Avenue and the other near the center of the project site. All buildings, foundations, and equipment related to agricultural use at the site were also removed from the site in the summer and fall 2004. *Figure 2.3 Aerial Photo* provides an overhead view of the project site taken in July of 2003, in which the former uses at the site are visible.

The Natomas Main Drainage Canal runs along the eastern property boundary. Along the project side of the Canal, a levee topped by a dirt road runs the length of the site. A strip of riparian vegetation occurs between the levee and the Canal.

The Orchard Lane and West El Camino Avenue intersection provides primary access to the site. The pavement ends where Orchard Lane enters the site and becomes dirt driveways that serve as access to the rest of the property.

Sewer and water lines run along West El Camino Avenue. Power lines run along the site frontage on West El Camino Avenue, along the west side of Orchard Lane, and across the Canal to bisect the site along the dirt road next to the equipment storage area (former residence). Power lines are indicated on the aerial photograph in *Figure 2.3*.

#### **Adjacent Properties**

Interstate 80 is located along the northern property boundary of the project site. Land uses immediately adjacent to the project site include residential development south along West El Camino Avenue and east across the Canal. An office park with three commercial office buildings is located across the Canal from the project site and fronts both Interstate 80 and Interstate 5. Barandas Park is located across the Canal along the north side of West El Camino Avenue. The land immediately west and north across Interstate 80 from the project site is in crop production. The West El Camino Avenue interchange with Interstate 80 is adjacent to that property. A truck stop, fueling station, and restaurant are located across the overpass and are visible from the project site. *Figure 2.4 Existing Land Use* identifies land uses on and adjacent to the site.

#### 2.3 GENERAL PLAN, COMMUNITY PLAN, AND ZONING DESIGNATIONS

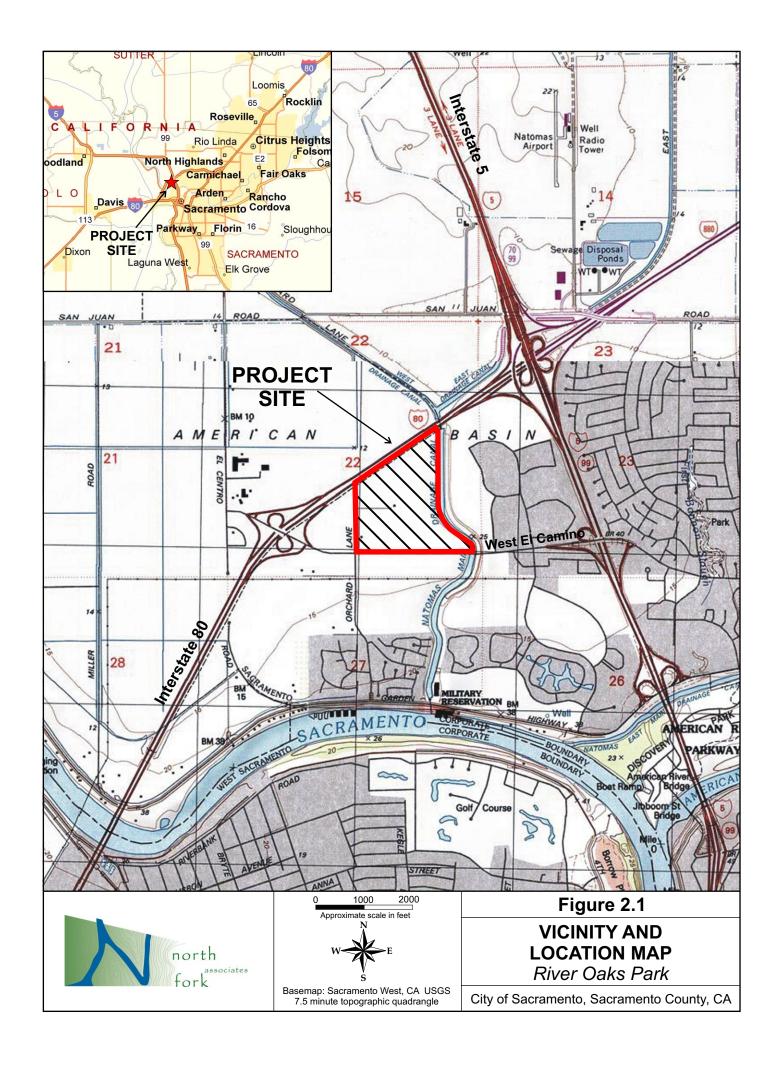
#### **Project Site**

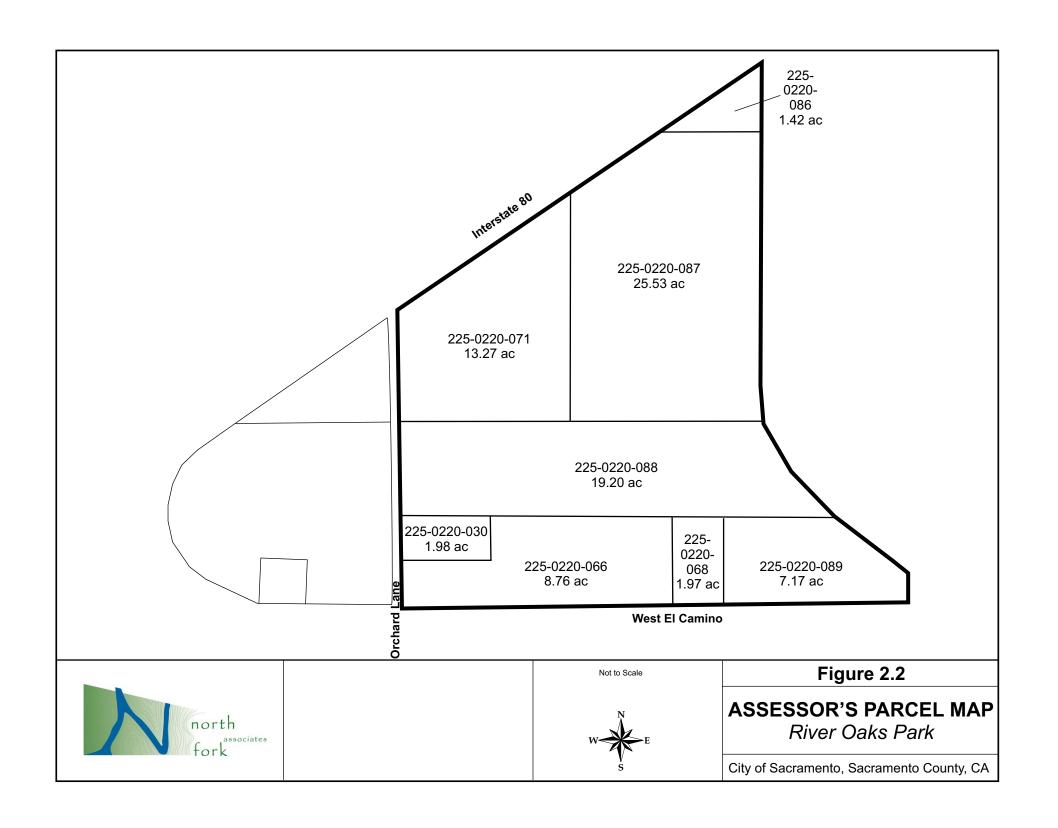
The project site has land use designations in three City land use planning documents: the *City of Sacramento General Plan*, the *South Natomas Community Plan*, and the *Sacramento City Code*, as summarized in *Table 2.1*. The General Plan designates the entire ±80.33-acre site for Low Density Residential, the Community Plan designates the site for both Low and Medium Density Residential use, and the *Sacramento City Code* designates the site for Agriculture and Agriculture Planned Unit Development.

#### **Surrounding Properties**

The *City of Sacramento General Plan* designates land immediately to the west of the project site as Community/ Neighborhood Commercial & Offices, and to the southwest, as Medium Density Residential.

The South Natomas Community Plan designates these same parcels to the west as Community Commercial and to the southwest across West El Camino Avenue as Neighborhood Commercial. The land across Interstate 80 is in the unincorporated County and is designated Agricultural Cropland in the 1993 County of Sacramento General Plan.







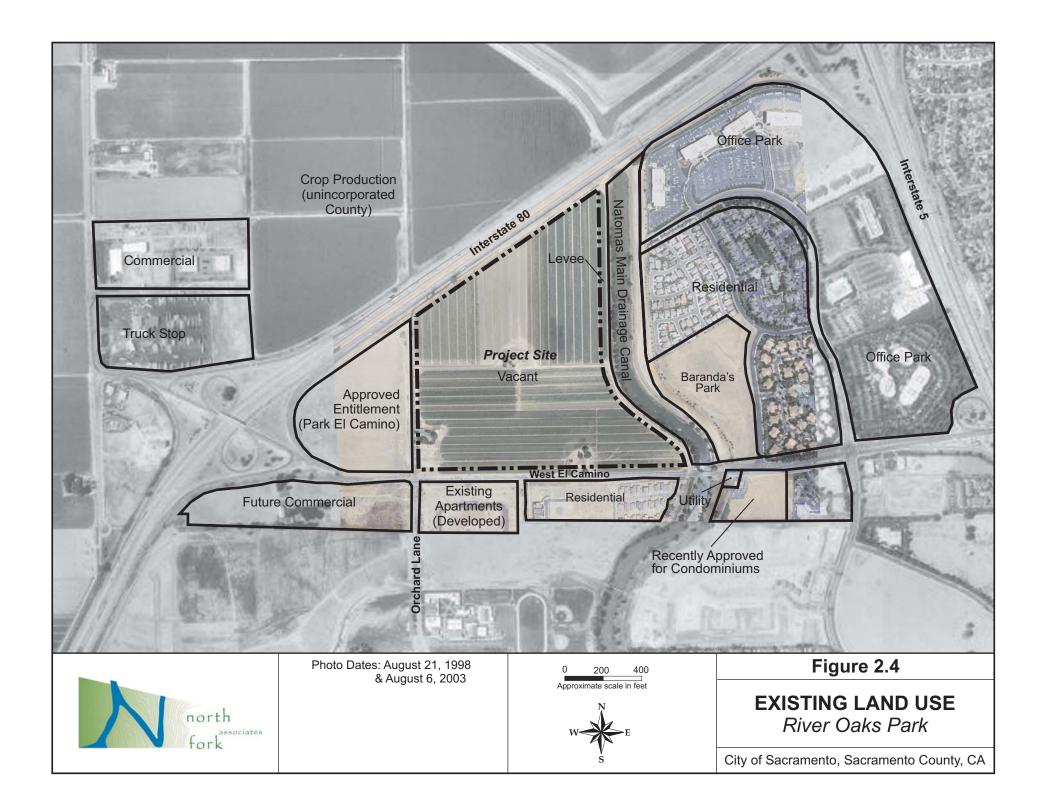


Table 2.1
Proposed Land Use Designation Changes

	Current Designation	Proposed Amendment
City of Sacramento General Plan	±80.33 acres* Low Density Residential 4 -15 du/na*	No change
South Natomas Community Plan	±46.83 acres* Residential 4-8 du/na ±33.50 acres* Residential 7-15 du/na	±28.02 acres Residential 7-15 du/na ±30.24 acres Residential 11-21 du/na** ±9.23 acres Parks/Open Space ±0.50 acres Recreation Center
Sacramento City Code (formerly the Zoning Code)	±13.48 acres* Agriculture (A) ±66.85 acres* Agriculture Planned Unit Development (A-PUD)	±80.33 acres* Single Family Alternate Planned Unit Development (R1-A PUD)

Source: Morton & Pitalo Inc.

Notes: du/na - dwelling units per net acre

#### 2.4 PROJECT OBJECTIVES

The proposed project has the following objectives:

- 1. Develop homes that will appeal to first-time homebuyers close to Downtown Sacramento;
- 2. Develop parkland at a ratio of 5.0 acres for every 1,000 residents of the project site;
- Create a Planned Unit Development which integrates City of Sacramento Smart Growth goals of integrated walkable neighborhoods and provides recreation and residential opportunities in close proximity to Downtown Sacramento and to regional transportation;
- 4. Develop a road and multi-mode trail system that integrates City of Sacramento street standards and meets the objectives of the City of Sacramento Bikeways Master Plan;
- 5. Develop residential uses consistent with the goals of the South Natomas Community Plan.

#### 2.5 PROJECT COMPONENTS

#### **Project Overview**

As shown on the proposed Tentative Subdivision Map and summarized in *Table 2.2*, the project proposes to subdivide the eight existing parcels into 642 residential lots and 5 lots to provide

<sup>\*</sup>Gross acreage includes easement(s).

<sup>\*\*</sup>City Development Services Department has determined the Residential 11-21 du/na land use consistent with the General Plan (pers. comm., Johnson-2004b)

parks, recreation, and stormwater detention. To accommodate the proposed subdivision map for the project site, the applicant is requesting amendments to the *South Natomas Community Plan* and *Sacramento City Code* Zoning Regulations. The project also proposes to construct homes, a private recreation center, and associated infrastructure as presented in the proposed subdivision map. These amendments and construction activities including phasing are discussed below.

#### **South Natomas Community Plan Amendment**

The applicant is requesting a Community Plan Amendment to redesignate the existing  $\pm 80.33$  acres from  $\pm 46.83$  acres of Residential (4-8 du/na) and  $\pm 33.50$  acres of Residential (7-15 du/na) to  $\pm 29.55$  acres Residential (7-15 du/na),  $\pm 27.03$  acres Residential (11-21 du/na), and  $\pm 17.73$  acres Parks, and Open Space (which includes the water quality/detention Basin, the bicycle trail along the RD1000 canal, and the open space along the freeway), and  $\pm 6.02$  acres of roads.

#### **City Code Zoning Regulations Amendment**

The proposal would amend the *Sacramento City Code Zoning Regulations* to change the zoning district on the site from the current ±13.48 gross acres Agriculture (A) and ±66.85 gross acres of Agriculture Planned Unit Development (A-PUD) district to ±80.33 gross acres of Single Family Alternate Residential Planned Unit Development (R1-A PUD). The current and proposed changes to land use and zoning are shown in *Figure 2.5 Current and Proposed Community Plan Map* and *Figure 2.6 Current and Proposed Zoning Map*. *Figure 2.7 Tentative Subdivision Map* depicts the actual land uses proposed.

#### **Planned Unit Development**

The applicant has submitted the document *River Oaks Planned Unit Development Guidelines* (February 2004) with their development proposal and is proposing the City adopt a Planned Unit Development (PUD) zoning designation for the subject properties per these guidelines. The intent of the PUD Guidelines, which are subject to approval by the City, is to apply the City's land use standards to the entire proposed tentative map area rather than to individual lots. This permits the clustering of units in a manner that allows for flexibility in the provision of open space and common areas.

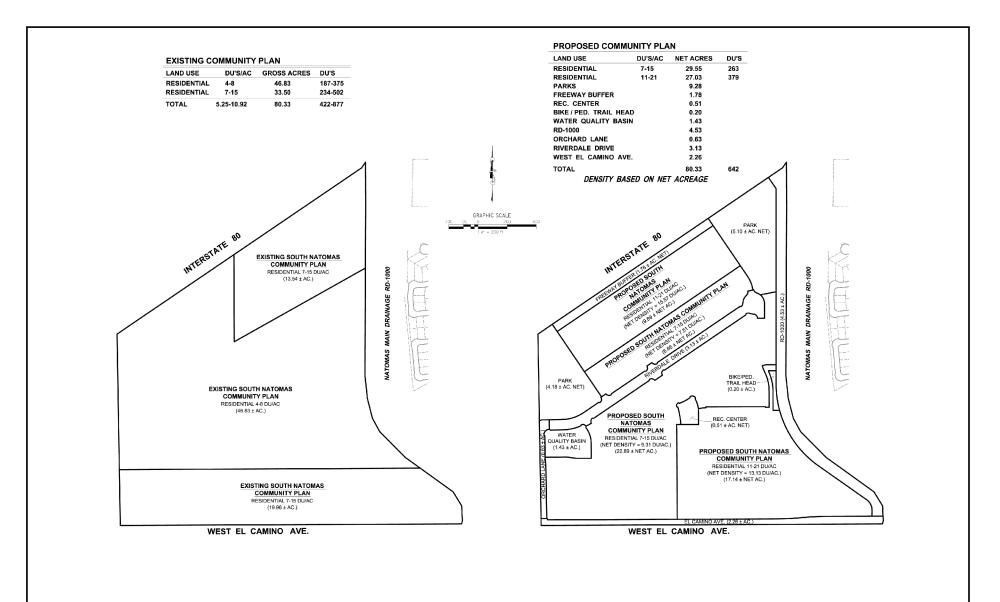
#### **Special Permit**

The applicant is requesting a Special Permit approval from the Planning Commission pursuant to Chapter 17.180.060 of the *Sacramento City Code* to allow for the mix of use types and density proposed as shown in *Table 2.2*.

#### **Construction Activities**

Subsequent to approval of the applicant's grading plan and prior to construction, site preparation and demolition activities would commence in conformance with Section 15.44 of the City Code. Demolition activities would include removal of the debris and former building foundations. Once demolition has occurred, the site would be graded to prepare for construction of infrastructure and buildings.

All construction activity would comply with federal and state regulations and the *Sacramento City Code*. The applicant is proposing to construct in a series of five phases the following project components, including housing, parks and recreation center, and infrastructure.



#### **EXISTING COMMUNITY PLAN**

#### PROPOSED COMMUNITY PLAN



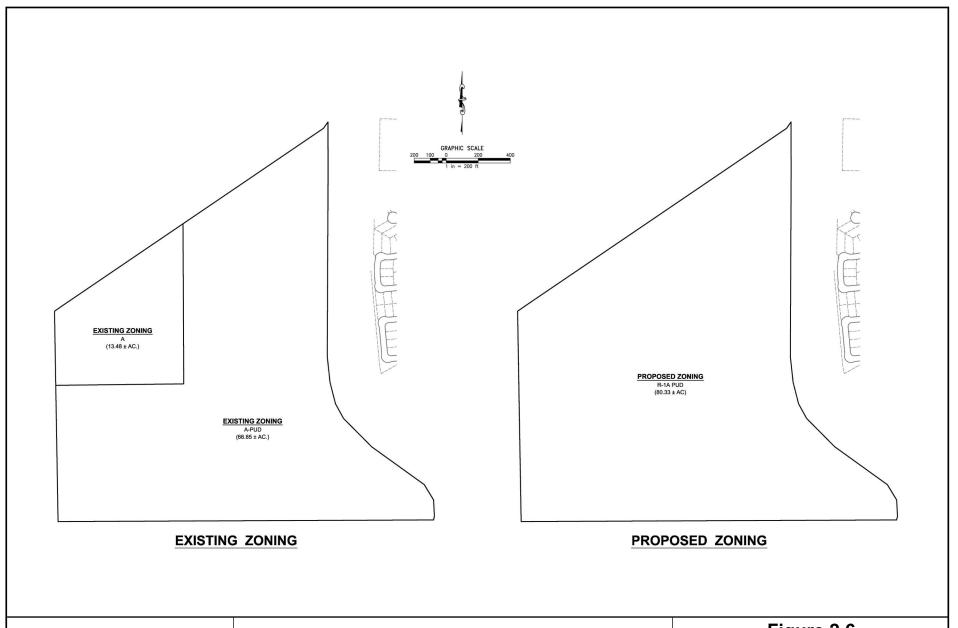
Source: MRO Engineer, Inc. May 2005

# Figure 2.5

# CURRENT AND PROPOSED COMMUNITY PLAN MAP

River Oaks Park

City of Sacramento, Sacramento County, CA





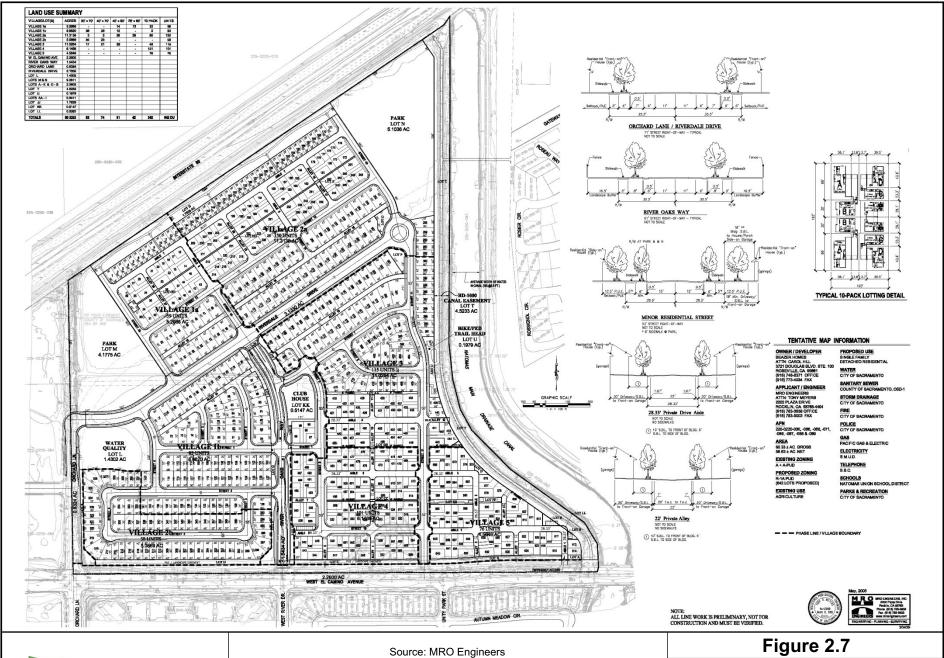
Zoning Map Provided by Morton & Pitalo, Inc. Date: June 2004

# Figure 2.6

# CURRENT AND PROPOSED ZONING MAP

River Oaks Park

City of Sacramento, Sacramento County, CA





Source: MRO Engineers Date: May 24, 2005

# **TENTATIVE SUBDIVISION MAP**

River Oaks Park

City of Sacramento, Sacramento County, CA

Table 2.2
Summary of Proposed River Oaks Park Land Uses

Land Use	Net Acres	DUs
Residential	±52.10	642
Parks /Open Space	±11.06	
Recreation Center	±0.51	sq. ft. N/A
Trailhead	±0.20	
Riverdale Drive	±3.13	
River Oaks Way	±1.54	
Orchard Lane	±0.63	
West El Camino Ave.	±2.26	
Water Quality/DetentionBasin	±1.43	
RD-1000 (Trail)	+4.52	
Other	2.95	
Total	±80.33	642

Includes landscape easements

#### Housing

The applicant is proposing to construct 642 single-family homes on  $\pm 52.10$  acres of the  $\pm 80.33$  acre site using four different housing types in two distinct neighborhoods. The proposed housing has the following dimensions:

- 91 units on 40 x 90 foot lots;
- = 93 units on 30 x 70 foot lots;
- = 74 units on 40 x 70 foot lots;
- 42 "Brownstone" units on 28 x 68 foot lots, and
- 342 units in "10 pack" lots in unit cluster configurations of 5 to 10 units each.

The architectural styles proposed for the housing types vary in the use of decorative features such as cornices, gables, porticos, pilasters, balconies, and distinct window treatments such as shutters and decorative frames.

#### **Parks and Recreation Center**

The applicant has included ±11.06-acres of parkland including a ±4.18-acre park at the northwest corner of the project, a ±5.10-acre park at the northeast corner, and a ±1.78 linear park between I-80 and the proposed residences. The proposed parks would consist of neighborhood parks, which typically include parking areas, restrooms, walkways, children's play equipment, dog parks, and sport fields for soccer, baseball, and volleyball. Other amenities may include family picnic areas, horseshoe pits, basketball courts, and toddler play areas. Parkland areas would become part of the City of Sacramento park system and be maintained by the City of Sacramento Department of Parks and Recreation.

On the east side of the proposed River Oaks Way, near the project's center, the applicant proposes to construct a private community recreation/swim center with vehicle parking, and landscaping on a  $\pm 0.5$ -acre lot owned and maintained by a Homeowners Association.

#### Infrastructure

The pedestrian bridge, roads, sidewalks, bicycle and transit facilities, open space areas, parks, and utilities to serve the project would be required by the City of Sacramento to be developed concurrently with the proposed project. Proposed improvements to existing roads, new roads and pedestrian/bike paths, and utility infrastructure are discussed below.

#### Homeowner's Association

As stated above, the proposed community open space and private recreation center would create common areas requiring maintenance. The applicant is proposing the formation of a Home Owners Association (HOA) to assume responsibility for maintaining the project's common areas.

#### **Circulation System**

The City of Sacramento *South Natomas Public Facilities Financing Plan and Facilities Benefit Assessment* adopted by the City in 1990 identifies future infrastructure improvements needed to serve the development identified in the *South Natomas Community Plan*. The traffic improvements proposed with the River Oaks Park project are described below. Project roads would become part of the public right of way and be maintained by the City of Sacramento Department of Public Works.

#### **Improvements to Existing Roads**

**West El Camino Avenue and Orchard Lane** Improvements to West El Camino Avenue and Orchard Lane are currently being constructed and include widening the roadway; establishment of a 25-foot easement for improvements, public utilities, and landscaping along the project side of the road (±2.30 acres); provision of sidewalks; and provision of Class II bicycle lanes. The project applicant is required to dedicate right of way to the City to accommodate improvements to West El Camino and Orchard Lane.

Improvements to Orchard Lane are being constructed concurrent with improvements to West El Camino Avenue and include extending the road north from the intersection with West El Camino Avenue to the location of a future intersection with the proposed Riverdale Drive. The road improvements would include a public utility easement, landscaping, sidewalks, and Class II bicycle lanes. The project is required to dedicate right of way to the City for these improvements.

**Riverdale Drive** This two-lane major collector street would complete the northern section of a road originally planned for in the *South Natomas Community Plan*. Riverdale Drive would link Orchard Drive to the park at the northeast side of the project with the rest of the Community Plan area by providing a route south to the Garden Highway near the Sacramento River.

Riverdale Drive would have a 71-foot right of way, a 48-foot roadbed, Class II bicycle lanes, and five-foot wide sidewalks along both sides of the street. The sidewalks on either side of

Riverdale Drive would be separated from the road by a six-foot landscape strip. The sidewalks would be separated from the proposed uses on either side of the road by a public utilities easement. This roadway would include on-street parking areas.

**River Oaks Way** This two-lane minor collector street would traverse the residential portion of the project site from the existing West El Camino Avenue to Riverdale Drive. At Riverdale Drive, River Oaks Way would become a residential street. This proposed minor collector street is to be constructed with a 61-foot right of way, a 34-foot roadbed, Class II bicycle lanes, and five-foot wide sidewalks along both sides of the street. The sidewalks on either side of River Oaks Way would be separated from the road by an eight-foot landscape strip. The sidewalks would also be separated from the proposed uses on either side of the road by a 16.5-foot landscape buffer. This roadway would include on-street parking areas.

*Minor Residential Streets* The project includes nineteen unnamed interior residential streets that would connect the residences to the proposed collector streets serving the project. These interior streets are proposed to be constructed with 53-foot right of ways, 30-foot roadbeds, no bicycle lanes, and five-foot wide sidewalks separated from the street by a six-foot wide landscape strip and from the uses on either side by 12.5-foot wide public utility and landscaping easements.

**28.33' Private Drive Isles** The project is served by sixteen 28.33-foot wide Private Drive Isles that would be constructed to include two travel lanes on 26.00-foot wide roadbeds with ten-foot front of building and five-foot side of building setbacks. These drive isles do not provide for sidewalks, bicycle lanes, or parking.

**22' Alleys** The project also incorporates four 22-foot wide Public Alleys that would be constructed to include two travel lanes on 20.00-foot wide roadbeds with ten-foot front of building and five-foot side of building setbacks. These alleys do not provide for sidewalks, bicycle lanes, or parking.

**Emergency Vehicle Access** A 22-foot driveway is proposed to provide emergency vehicle access from El Camino Avenue to interior residential roads through a gated entry near the El Camino Avenue bridge over the Canal.

#### Multi-Use Trail and Pedestrian Bridge over the Canal

The project includes a  $\pm 4.52$ -acre strip of land between the project and parallel to the Canal for a sixteen-foot wide pedestrian/bicycle trail along the Canal levee. The trail would feature a bridge over the Canal that would be located next to the proposed northeast side park. The trail would be constructed to City Department of Parks and Recreation standards with twelve-foot asphalt paving and two-foot decomposed granite shoulders. The paving would be three inches of asphalt concrete over a minimum twelve inches of aggregate base painted with a centerline stripe. A  $\pm 0.20$ -acre trailhead would be located approximately midway through the residential area along the trail and adjacent to the eastern most residential street.

#### **Utilities**

The project would construct electrical, natural gas, telephone, cable television, water, storm drain, and sewer infrastructure in the subdivision and along West El Camino Avenue, Orchard

Lane, Riverdale Drive, and residential streets in accordance with the City Department of Utilities requirements.

The project proposes to include a ±1.43-acre water quality/detention basin located adjacent to the southeast corner of Orchard Lane and Riverdale Drive. The basin would be designed to accumulate storm water runoff from the site to eliminate the potential for offsite flooding and/or sediment discharges resulting from implementation of the project.

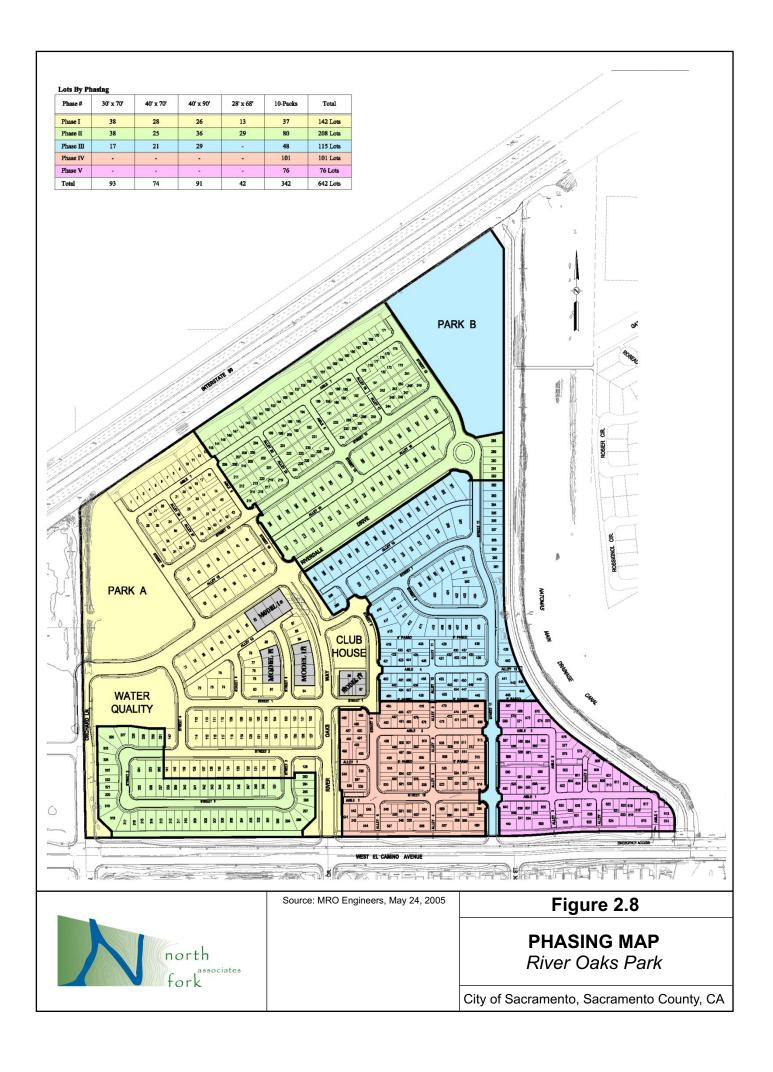
#### **Project Phasing**

The River Oaks Park project would be developed in five distinct construction phases described below. Each construction phase would install roadways, intersection controls and roundabouts, curb, gutter, and sidewalks, and as indicated on *Figure 2.8 Phasing Map*. A staging area potentially consisting of materials storage areas, temporary office trailers, parking areas for workforce and equipment would be needed for the duration of all project construction. The exact location of staging sites for each construction phase has not been determined

#### Phase I

Phase I would consist of grading of the entire property and installation of utility infrastructure to the site. First, the site would be cleared of all materials and graded using a City approved site grading plan. Subsequent to grading, all water and sewer piping, electrical wiring and conduit, cable television wiring and conduit, and telephone wiring and conduit would be installed. Phase I would also include:

- $\blacksquare$  Construction of the community clubhouse and swimming pool on a  $\pm 0.51$ -acres lot;
- Construction of the ±1.42-acre water quality/detention basin;
- © Construction of seventeen model homes indicated on the map in Figure 2.8;
- Construction of an additional 125 homes located in the northwest section of the project site;
- Installation of noise mitigation measures and/or landscape buffers between Interstate 80 and the project; and
- Construction of the park at the northwest corner of the project site.
- Installation of noise mitigation measures and/or landscape buffers between Interstate 80 and the project; and
- Construction of the park at the northwest corner of the project site.



#### Phase II

Phase II would consist of construction of 208 housing units at two project site locations. The first is at the north side of the project site on a section of land between the new Riverdale Lane and Interstate 80. The second is on a section of land located at the corner of West El Camino Avenue and Orchard Lane. Phase II would also install noise mitigation measures along West El Camino Avenue.

#### Phase III

Phase III would consist of construction of 115 housing units in an area at the east side of the project site south of Riverdale Lane. This phase would also include:

- Construction of the park at the northeast corner of the project site;
- Installation of a  $\pm 0.20$ -acre trail head;
- © Construction and landscaping of the trail system along the Natomas Main Drainage Canal levee on two easement lots totaling ±4.52 acres; and
- The construction of a pedestrian bridge linking the project trail to the trails across the Canal.

#### Phase IV

Phase IV would consist of construction of 101 housing units on lots located along West El Camino Avenue at the midpoint of the project site and at the center of the site. Phase IV would continue construction of the sound wall and landscaping along West El Camino Avenue.

#### Phase V

Phase V would consist of construction of 76 units located along West El Camino Avenue at the east end of the project site and in the center of the site. Phase V would continue construction of the sound wall and landscaping along West El Camino Avenue.

#### **Utilities and Services**

The following agencies and private companies have been identified as providers of facilities and services for the proposed River Oaks Park project:

ELECTRICITY AND GAS

Pacific Gas and Electric Company

FIRE PROTECTION

City of Sacramento Fire Department

City of Sacramento Police Department

SCHOOLS

Natomas Unified School District

SOLID WASTE City of Sacramento Public Works Solid Waste Division
SEWER Sacramento Regional County Sanitation District #1

TELEPHONE SBC Telephone Company

WATER City of Sacramento Department of Utilities

CABLE Comcast Cable

#### 2.6 ENTITLEMENTS AND REQUIRED APPROVALS

The proposed River Oaks Park project entitlements include, but may not be limited to, the following approvals from public agencies, as indicated in *Table 2.3*. The entitlements which are accompanied by an asterisk (\*) are discussed following the table. The subdivision map approval and the amendments to the Community Plan and City Code Zoning are discussed in Section 2.5 above. In addition to the discretionary entitlements listed below, the project would require approval of improvement plans and issuance of encroachment and building permits.

Table 2.3
Required Entitlements

Entitlement	Agency
Tentative Map	City of Sacramento
Community Plan Amendment	City of Sacramento
Sacramento City Code Zoning Amendment	City of Sacramento
Final Map	City of Sacramento
National Pollution Discharge Elimination System	Regional Water Quality Control Board
Section 404 Permit *	U.S. Army Corps of Engineers
Streambed Alteration Agreement *	State Department of Fish and Game
Water Quality Certification *	Regional Water Quality Control Board
SB 221 Water Supply Verification *	City of Sacramento Department of Utilities
Encroachment Permit *	Reclamation District 1000

#### **Section 404 Permit**

The proposed pedestrian bridge spanning the Canal may require a permit if it is designed in a manner that would cause the discharge of fill and/or dredge materials into "waters of the United States" as defined by Section 404 of the Clean Water Act.

#### **Streambed Alteration Agreement**

Under Section 1600 et. seq., of the California Fish and Game Code, an entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake prior to acquiring a permit from the California Department of Fish and Game (DFG).

#### **Water Quality Certification**

For any activity which may result in a discharge to a water body, the Regional Water Quality Control Board (RWQCB) would require the applicant to obtain a Section 401 (Clean Water Act) water quality certification that the proposed activity would comply with state water quality standards.

#### **SB 221 Water Supply Verification**

Senate Bill 221 (Chapter 642, Statutes of 2001) requires detailed information regarding water availability for this project to be provided to the City prior to project approval. This information would serve as the evidentiary basis for an approval action by the City of Sacramento with regard to sufficient water supply.

#### **Encroachment Permit**

The Natomas Main Drainage Canal is under the jurisdiction of the State Reclamation Board. The project would be required to obtain an encroachment permit from the local district, Reclamation District 1000 (RD-1000), to place the proposed pedestrian/bicycle bridge over the Canal and if the trail is within their jurisdiction.

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# **CHAPTER 3**

**EXECUTIVE SUMMARY** 

#### CHAPTER 3 EXECUTIVE SUMMARY

This summary chapter is provided in accordance with State CEQA Guidelines Section 15123. As stated in the State CEQA Guidelines Section 15123(a), "[a]n EIR shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical." State CEQA Guidelines Section 15123(b) states, "[t]he summary shall identify: (1) Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; (2) Areas of controversy known to the Lead Agency including issues raised by agencies and the public; and (3) Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects." Accordingly, this summary includes:

- Summary of the proposed project,
- Significant effects of the project,
- © Cumulative impacts,
- Areas of known controversy and issues raised,
- Environmental setting for impact analysis,
- Alternatives to the proposed project, and
- Summary of environmental impacts and mitigation measures.

#### 3.1 SUMMARY OF THE PROPOSED PROJECT

The River Oaks Park project proposes to subdivide ±80.33 acres of land to provide for construction of 642 single family homes, parks, pedestrian/bicycle trails and bridges, support infrastructure, and road improvements. *Figure* 2.7, in **CHAPTER 2, PROJECT DESCRIPTION** shows the proposed subdivision of the project site. The applicant has identified the following project objectives:

- Develop medium density single-family community close to Downtown Sacramento
- Develop adequate parkland and a private recreation center to serve the community
- Create a Planned Unit Development which integrates City of Sacramento Smart Growth goals of integrated walkable neighborhoods and provide recreation and residential opportunities in close proximity to Downtown Sacramento and regional transportation
- Develop a road and multi-mode trail system that integrates City of Sacramento street standards and meets the objectives of the City of Sacramento Bikeways Master Plan
- Develop residential uses consistent with the goals of the South Natomas Community Plan.

The City of Sacramento Development Services Department, as Lead Agency, prepared an Initial Study and Notice of Preparation (NOP) for the project in 2004. The Initial Study concluded that potential impacts related to Traffic and Circulation required that an EIR be prepared to analyze this impact area prior to any action on the proposed project.

#### 3.2 Areas of Known Controversy and Issues Raised

CEQA requires that the EIR "identify areas of controversy" that have been raised by either the public or public agencies (Section 15123, CEQA Guidelines). The comments received on the NOP and conversations with City of Sacramento staff identified the following areas of potential controversy and/or the potential for significant impacts associated with the proposed project:

- Impacts to biological resources;
- Removal of trees;
- Impacts to traffic system;
- Impacts from the use of sound walls; and
- The adequacy of the area drainage system.

#### 3.3 Environmental Setting for Impact Analysis

#### **CEQA Requirements**

Both the CEQA Guidelines and CEQA case law provide relevant provisions for determining the appropriate baseline from which environmental impacts should be evaluated. The CEQA Guidelines indicate that the baseline for environmental impact analysis is normally the environmental conditions existing at the time of the NOP, which usually represents the beginning of the environmental review of the project.

#### **Baseline Condition for this EIR**

The baseline condition for this EIR is considered to be the conditions existing at the time of circulation of the NOP, which occurred between December 2004 and January 2005. As discussed in Chapter 2, Project Description, the proposed project site is located in the South Natomas Community in the City of Sacramento, approximately one mile northeast of the Sacramento River. The site is within the Natomas Basin, a low-lying region in the Sacramento Valley, located east of the Sacramento River and north of the American River. The Natomas Basin contains incorporated and unincorporated areas within the jurisdictions of the City of Sacramento, Sacramento County, and Sutter County. Historically the basin was primarily in agricultural production. The water conveyance systems within the Natomas Basin were constructed to transport water and provide drainage. They also provide nesting, feeding, and migration corridor habitat for a variety of species in the basin.

Currently, the project site is vacant and fallow land, which until recently was the location of a single-family home and farm. Water and wastewater disposal were provided by a well and septic system located next to the residence. All buildings were removed from the site in summer and fall of 2004. Orchard Lane and West El Camino Avenue are the primary roadways adjacent to the site. The ±80.33-acre project site supports approximately a dozen trees, including almond, walnut, white mulberry, California sycamore, Grecian bay, and olive. An assortment of non-native grasses and weeds volunteer on the roads and borders of the cultivated areas. The Natomas Main Drainage Canal levee forms the eastern border of the area proposed for residential development and is the location of the proposed pedestrian bridges.

The project site has land use designations in three City land use planning documents; the *City of Sacramento General Plan*, the *South Natomas Community Plan*, and the *Sacramento City Code*. The General Plan designates the entire ±80.33-acre site for Low Density Residential, the Community Plan designates the site for both Low and Medium Density Residential use, and the City Zoning Code designates the site for Agriculture and Agriculture Planned Unit Development.

The Natomas Basin Habitat Conservation Plan (NBHCP) is a conservation plan for an area encompassing approximately 53,537 acres north of Sacramento including the project site. The NBHCP was prepared and implemented by a variety of federal, state, and local agencies including:

- US Fish and Wildlife Service;
- California Department of Fish and Game;
- City of Sacramento;
- Sutter County;
- Reclamation District 1000; and
- Natomas Basin Conservancy.

Habitat Conservation Plans (HCP) are required by the federal Endangered Species Act, and are designed to support applications for federal permits under Section 10 (a)(1)(B) of the Endangered Species Act. The NBHCP serves as an incidental take permit under State law pursuant to Section 2081(b) of the California Fish and Game Code. The purpose of the NBHCP is to promote biological conservation in conjunction with economic and urban development within the HCP area. The NBHCP establishes a multi-species conservation program to minimize and mitigate the expected loss of habitat values and incidental take of Covered Species that could result from urban development, and other human activities in the HCP area. The City of Sacramento requires the proponents of all new development in the HCP area to dedicate suitable land or fees as described in Chapter V of the NBHCP to minimize and mitigate the take of species covered by the HCP.

#### 3.4 SIGNIFICANT EFFECTS OF THE PROJECT

Implementation of the project would result in various impacts on the environment as described in the Initial Study and EIR. Most of the impacts associated with implementation of the proposed River Oaks Park project are not considered significant after implementation of the mitigation measures. However, one impact under Traffic and Circulation, "Increased vehicle trips or traffic congestion," remains significant and unavoidable after implementation of mitigation measures. The specific street segments and conditions under which traffic impacts are expected to remain significant and unavoidable are:

- 1. Baseline Plus Project Conditions:
  - West El Camino Avenue between El Centro Road and I-80 Westbound Ramps
  - West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane
  - West El Camino Avenue between Grassland Way and Gateway Oaks Drive

- 2. Cumulative Plus Project without Gateway Oaks Drive Extension Conditions (with Four Lanes on West El Camino Avenue):
  - West El Camino Avenue between I-80 Eastbound Ramps and I-5 southbound ramps
- 3. Cumulative Plus Project with Gateway Oaks Drive Extension Conditions (with Four Lanes on West El Camino Avenue):
  - West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane
  - West El Camino Avenue between Grassland Way and Gateway Oaks Drive

Levels of impact significance both before and after mitigation, and suggested mitigation measures are identified for all traffic impacts in the traffic analysis prepared by the City of Sacramento and Dowling and Associates in Chapter 4, Environmental Setting, Impacts & MITIGATION MEASURES – TRAFFIC AND CIRCULATION. *Table 3-1*, at the end of this chapter provides a list of the traffic impacts identified in Chapter 4.

Mitigation measures from the Initial Study, with level of significance before and after implementation, are included in *Table 3-2* for reference. The project applicant has already agreed to implement the mitigation measures identified in the Initial Study. The Initial Study identifies the basis for concluding the impacts in the following resource areas would be less-than-significant, or less-than-significant with mitigation:

- Land Use and Agriculture
- Population and Housing
- Seismic Hazards, Geology, and Soils
- Hydrology and Water Quality
- Air Quality
- Biological Resources
- Hazards
- Noise
- Public Services and Utilities
- Aesthetics
- Cultural Resources
- Recreation

#### 3.5 CUMULATIVE IMPACTS

The cumulative analysis for this project is based on "a summary of projections contained in an adopted general plan or related planning documents which is designed to evaluate regional or area-wide conditions..." (Section 15130(b)(1)(B), CEQA Guidelines) which in this case is the cumulative condition presented in the *South Natomas Community Plan EIR* (City of Sacramento,

1988). The past, present, and reasonable foreseeable future projects to be included in the cumulative impact analysis pursuant to CEQA Guidelines, Section 15130 is the buildout of the *South Natomas Community Plan*, as summarized in that Plan. The 2000 U.S. Census reported the average owner occupied household size in the City of Sacramento as being 2.65 persons. Given the average household size, it is estimated 1,733 persons will live at the project site subsequent to construction and full occupancy of its 654 single-family homes. In 2000, according to the City of Sacramento General Plan Housing Element (SGP HE), the entire area of the SNCP was 3,521 persons short of the buildout population of 42,199 persons. The proposed project, if built, would therefore accommodate 49.2% of remaining SNCP buildout population. While the proposed project would accommodate close to half of the remaining SNCP buildout population, this growth is consistent with that called for in the Community Plan.

A stand alone analysis of the project's effects on the traffic system, including analysis of the cumulative scenario, was prepared by the City of Sacramento and Dowling and Associates and is provided in Chapter 4, Environmental Setting, Impacts & Mitigation Measures – Traffic and Circulation.

The Sacramento Federal Ozone Nonattainment Area (SFNA) is comprised of five air districts in the southern portion of the Sacramento air basin. With two exceptions, this area is in attainment for all state and national ambient air quality standards (AAQS). However, the SFNA is designated a "serious" nonattainment area for the federal eight hour AAQS for ozone, and is also a "serious" nonattainment area for the state one hour ozone standard. As a part of the SFNA, Sacramento County is out of compliance with the state and federal ozone standards.

With respect to the state and federal 24-hour PM10 AAQS, Sacramento County is designated nonattainment, although the four remaining air districts in the Sacramento region are designated nonattainment for the state AAQS and unclassified/attainment areas for the federal AAQS. Additionally, in June 2004, the USEPA proposed to classify Sacramento County in attainment of the new federal PM2.5 standard. Ambient air quality standards define clean air. Specifically, air quality standards establish the concentration above which a pollutant is known to cause adverse health effects to sensitive groups within the population, such as children and the elderly. The amount of pollutants released and the atmosphere's ability to transport and dilute the pollutants affect a given pollutant's concentration in the atmosphere. Factors affecting transport and dilution include terrain, wind, atmospheric stability, and, for photochemical pollutants, sunlight. Sacramento's poor air quality can largely be attributed to emissions, geography, and meteorology. The proposed project will have cumulative effects to air quality in the project area. The total mitigated emissions of summertime ROG, summertime NOx, and wintertime NOx are expected to exceed the SMAQMD thresholds after implementation of standard mitigation measures. SMAQMD has determined that implementation of Initial Study mitigation measure 5.1 (payment of fees) would be sufficient to reduce project related operational emissions to less-than-significant levels.

#### 3.6 ALTERNATIVES TO THE PROPOSED PROJECT

Pursuant to CEQA Guidelines Section 15126.6(a), an EIR shall describe "a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain most of

the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Evaluation of alternatives to the proposed project that could reduce significant impacts is a fundamental objective of the environmental review process. The range of alternatives required in an EIR is governed by the "rule of reason." The EIR must evaluate a sufficient range of alternatives to foster an informed discussion of reasonable choices. The alternatives examined in the EIR were developed by the City of Sacramento. Chapter 4, Environmental Setting, Impacts & MITIGATION MEASURES - TRAFFIC AND CIRCULATION, contains the alternatives analysis for this EIR. Alternatives analyzed include:

- Alternative A: No Project Alternative (no development) as required by CEQA,
- Alternative B: Onsite Low-Density Alternative,

The analysis of each alternative focuses on the ability of the alternative to reduce or avoid any of the significant or potentially significant impacts of the proposed project (each impact is listed in Section 3.4 above). Both Alternatives analyzed are expected to have lesser traffic impacts that the proposed project.

#### 3.7 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Chapters 4 through 6 of this EIR evaluate in detail the environmental impacts that would result from implementation of the proposed project. As the Lead Agency, the City of Sacramento Development Services Department, Environmental Planning, in its review of the proposed project and determination for action, will consider the entire environmental evaluation contained in this EIR. Following preparation of the Final EIR, the City of Sacramento will have the option to certify that the EIR: (1) has been completed in compliance with CEQA; and (2) was presented to the decision-making body of the lead agency and that the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project (Section 15090, CEQA Guidelines).

Impacts of the proposed project are classified as:

Less than Significant -effects that are not substantial according to CEQA;

*Significant/Potentially Significant* – potentially substantial adverse changes in the environment for which mitigation measures must be recommended, if feasible;

**Significant and Unavoidable** – substantial adverse changes in the environment that cannot feasibly be reduced by mitigation measures to a less-than-significant level.

# TABLE 3.1 Impact Summary for Environmental Impact Report TRAFFIC

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Baseline Plus Project C	onditions		
Intersection Impacts			
A) West El Camino Avenue/ I-80 Westbound Off-Ramps (#1)	S	Install a traffic signal. This mitigation measure would improve the level of service from LOS F to LOS C during both the AM and PM peak hours.	LTS
B) West El Camino Avenue/ I-80 Eastbound Off-Ramps (#2)	S	Install a traffic signal. Widen the northbound approach for a length of 250 feet to provide a separate left turn lane and a separate right turn lane. Restripe the westbound approach from a shared through-right lane to a separate through lane and a right turn lane. This mitigation measure would improve the level of service from LOS F to LOS C during both the AM and PM peak hours compared to the Baseline No Project conditions.	LTS
C) West El Camino Avenue/ River Oaks Way (Proposed)/ West River Drive (#4)	S	Install a traffic signal. This mitigation would improve the level of service from LOS E to LOS B during the AM peak hour, and from LOS F to LOS B during the PM peak hour.	LTS
Street Segments Impa	cts		
A) West El Camino Avenue between El Centro Road and I-80 Westbound Ramps, and, B) West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane	S	Widen West El Camino Avenue in both segments from 2 lanes to 4 lanes. This mitigation would improve the level of service from LOS F to LOS B for the segment between El Centro Road and I-80 Westbound Ramps, and improve the level of service from LOS F to LOS C for the segment between I-80 Eastbound Ramps and Orchard Lane, reducing the impact of the proposed project to less than significant level.  The implementation of this mitigation measure would require widening segments of West El Camino Avenue between El Centro Road and Orchard Lane to 4-lanes, which would also require widening the I-80 overcrossing. The City is in the process of widening West El Camino Avenue to 4-lanes at the time of this analysis (outside the limits of these two road segments). At present, widening West El Camino	SU

# TABLE 3.1 Impact Summary for Environmental Impact Report TRAFFIC

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		Avenue for the segments beyond the limits of currently ongoing project is not funded; and as per Metropolitan Transportation Plan (MTP) for 2025 the expansion of freeway overcrossing is not anticipated until the year 2012. Furthermore, implementation of this mitigation measure would require Caltrans' approval for the work within the limits of I-80 interchange and overcrossing, and may require additional right-of-ways over which the applicant has no control.  In view of the above, this mitigation measure is infeasible as it cannot be accomplished at least in the near term / under the Baseline Plus Project conditions.	
C) West El Camino Avenue between Grassland Way and Gateway Oaks Drive	S	To mitigate this impact to a less-than-significant level, West El Camino Avenue between Grassland Way and Gateway Oaks Drive would need to be widened from 4 lanes to 6 lanes. The City is in the process of widening West El Camino Avenue to 4-lanes at the time of this analysis (outside the limits of this segment). At present, widening West El Camino Avenue for the segments beyond the limits of currently ongoing project is not funded; also, widening West El Camino Avenue in this particular segment is not included in the MTP for 2025. Moreover, the applicant has no control over the implementation of the required improvements as they are outside the proposed project boundary, and may also involve acquisition of additional right-of-way.  In view of the above, this mitigation measure is infeasible as it cannot be accomplished at least in the near term / under the Baseline Plus Project conditions.	SU
Freeway Off-Ramps Imp	pacts		
A) I-80 Westbound Off-Ramp at West El Camino Avenue	S	Install a traffic signal. This mitigation is also recommended to mitigate the intersection impact. This mitigation measure would reduce the anticipated queues on the off-ramp during both the AM and PM peak hours, and therefore the available storage lengths on the ramps are adequate for the anticipated queues.	LTS

# TABLE 3.1 Impact Summary for Environmental Impact Report

## **TRAFFIC**

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
B) I-80 Eastbound Off-Ramp at West El Camino Avenue	S	Install a traffic signal. Widen the northbound approach for a length of 250 feet to provide a left turn lane and a right turn lane. This mitigation is also recommended to mitigate the intersection impact. This mitigation measure would reduce the anticipated queues on the off-ramp during both the AM and PM peak hours, and therefore the available storage lengths on the ramps are adequate for the anticipated queues.	LTS
Bicycle System Impacts	NI	No mitigation measures are required.	
Pedestrian System Impacts	NI	No mitigation measures are required.	
Transit Impacts	NI	No mitigation measures are required.	
Cumulative Plus Project	without Gat	eway Oaks Drive Extension Conditions – 4 Lanes on West El Camin	o Avenue
A) West El Camino Avenue/ Gateway Oaks Drive (#6)	S	Provide overlap traffic signal phasing to allow northbound Gateway Oaks Drive right turning traffic to proceed on a green arrow simultaneously with the westbound West El Camino Avenue left turning movement, and prohibit U-turns for the westbound left turning movement. This mitigation measure would reduce the delay to less than 5 seconds compared to the Cumulative No Project (with 4 lanes on West El Camino Avenue conditions during the PM peak hour	LTS
Street Segments Impac	ts		

# TABLE 3.1 Impact Summary for Environmental Impact Report TRAFFIC

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
A) West El Camino Avenue between I-80 Eastbound Ramps and I-5 Southbound Ramps		The necessary mitigation measures required to offset the significant traffic impacts of the proposed project on the street segments listed to less than significant levels is to widen West El Camino Avenue from 4-lanes to 6-lanes between I-80 and I-5, which would also require widening I-80 overcrossing to 6-lanes and reconstructing the bridge over Natomas Main Drainage Canal.  The City is in the process of widening West El Camino Avenue to 4-lanes between Orchard Lane and Natomas Main Drainage Canal at the time of this analysis. At present no definite funding source has been identified for widening West El Camino Avenue to 6-lanes; as per MTP for 2025 widening West El Camino Avenue to 6-lanes; is included only for the segments between I-80 and Natomas Main Drainage Canal under Tier 2 improvement category (no definite funding identified). Widening West El Camino Avenue to 6-lanes east of Natomas Main Drainage Canal has yet not been programmed/funded at any level. Furthermore, implementation of this mitigation measure would require Caltrans' approval for the work within the limits of interchanges and overcrossings at I-80 as well as I-5, and may require additional right-of-ways over which the applicant has no control.  In view of the above, this mitigation measure is infeasible and it is not being able to be accomplished in a reasonably foreseeable manner. The impact of the proposed project is therefore, considered significant and unavoidable.  It may also be noted that as outlined under Regulatory and Planning Context, the City is investigating the option of not widening West El Camino Avenue to more than 4-lanes. This approach is consistent with: (i) City's smart growth principles that identify the need for a balanced transportation system, including ensuring improved walkability and improved bicycle friendly infrastructure, (ii) upcoming General Plan update which aims at reexamining the current LOS C goal and recognize alternative transportation mode opportunities, support developments in infill areas and near	

# TABLE 3.1 Impact Summary for Environmental Impact Report

## **TRAFFIC**

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Freeway Off-Ramps Impacts	NI	No mitigation measures are required.	
Bicycle System Impacts	NI	No mitigation measures are required.	
Pedestrian System Impacts	NI	No mitigation measures are required.	
Transit Impacts	NI	No mitigation measures are required.	
Cumulative Plus Project	t with Gatew	ay Oaks Drive Extension Conditions – 4 Lanes on West El Camino A	venue
Intersections Impacts			
A) West El Camino Avenue/ Orchard Lane (#3)	S	Reconfigure the northbound and southbound approaches from one left turn lane, one thru lane, and one right turn lane to one left turn lane, one shared left-through lane, and one right turn lane. Change the signal phasing for the northbound/southbound approach from protected phasing to split phasing. This mitigation measure would reduce the delay to less than 5 seconds compared to the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions during the AM peak hour. During the PM peak hour, this mitigation measure would improve the level of service from LOS D to LOS C.	LTS
Street Segments Impac	ets		
A) West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane	S	The necessary mitigation measures required to offset the significant traffic impacts of the proposed project on the street segments listed to less than significant levels is to widen West El Camino Avenue from 4-lanes to 6-lanes between I-80 and I-5, which would also require widening I-80 overcrossing to 6-lanes and reconstructing the bridge over Natomas Main Drainage Canal.	SU
B) West El Camino Avenue between Grassland Way and		The City is in the process of widening West El Camino Avenue to 4-lanes between Orchard Lane and Natomas Main Drainage Canal at the time of this analysis. At	

# TABLE 3.1 Impact Summary for Environmental Impact Report TRAFFIC

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Gateway Oaks Drive		present no definite funding source has been identified for widening West El Camino Avenue to 6-lanes; as per MTP for 2025 widening West El Camino Avenue to 6-lanes is included only for the segments between I-80 and Natomas Main Drainage Canal under Tier 2 improvement category (no definite funding identified). Widening West El Camino Avenue to 6-lanes east of Natomas Main Drainage Canal has yet not been programmed/funded at any level. Furthermore, implementation of this mitigation measure would require Caltrans' approval for the work within the limits of interchanges and overcrossings at I-80 as well as I-5, and may require additional right-of-ways over which the applicant has no control.  In view of the above, this mitigation measure is infeasible and it is not being able to be accomplished in a reasonably foreseeable manner. The impact of the proposed project is therefore, considered significant and unavoidable.  It may also be noted that as outlined under <i>Regulatory and Planning Context</i> , the City is investigating the option of not widening West El Camino Avenue to more than 4-lanes. This approach is consistent with: (i) City's smart growth principles that identify the need for a balanced transportation system, including ensuring improved walkability and improved bicycle friendly infrastructure, (ii) upcoming General Plan update which aims at reexamining the current LOS C goal and recognize alternative transportation mode opportunities, support developments in infill areas and near transit stations. The traffic operations with and without River Oaks project under both scenarios, i.e. considering West El Camino Avenue as a 4-lane vs. 6-lane facility are evaluated and compared in different sections of this study.	
Freeway Off-Ramps Impacts	NI	No mitigation measures are required.	
Bicycle System Impacts	NI	No mitigation measures are required	

# TABLE 3.1 Impact Summary for Environmental Impact Report

## **TRAFFIC**

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Pedestrian System Impacts	NI	No mitigation measures are required	
Transit Impacts	NI	No mitigation measures are required	
Cumulative Plus Project	without Gat	eway Oaks Drive Extension Conditions – 6 Lanes on West El Camir	no Avenue
Intersections Impacts	NI	No mitigation measures are required.	
Street Segments Impacts	NI	No mitigation measures are required.	
Freeway Off-Ramps Impacts	NI	No mitigation measures are required.	
Bicycle System Impacts	NI	No mitigation measures are required.	
Pedestrian System Impacts	NI	No mitigation measures are required.	
Transit Impacts	NI	No mitigation measures are required.	

# TABLE 3.1 Impact Summary for Environmental Impact Report

## **TRAFFIC**

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
(Continued next page)			
Cumulative Plus Project	t with Gatew	ay Oaks Drive Extension Conditions – 6 Lanes on West El Camino A	venue
Intersections Impacts			
A) West El Camino Avenue/ Orchard Lane (#3)	S	Reconfigure the northbound and southbound approaches from one left turn lane, one thru lane, and one right turn lane to one left turn lane, one shared left-through lane, and one right turn lane. Change the signal phasing for the northbound/southbound approach fro protected phasing to split phasing. This mitigation measure would reduce the delay to less than 5 seconds compared to the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions during the AM peak hour. During the PM peak hour, this mitigation measure would improve the level of service from LOS D to LOS C.	LTS
Freeway Off-Ramps Impacts	NI	No mitigation measures are required.	
Bicycle System Impacts	NI	No mitigation measures are required.	
Pedestrian System Impacts	NI	No mitigation measures are required.	
Transit Impacts	NI	No mitigation measures are required.	

Significance before Mitigation	Mitigation Measure(s)					
LAND USE PLANNING						
	None					
	POPULATION AND HOUSING					
	None					
	SEISMICITY, SOILS, AND GEOLOGY					
	None					
	Water					
PSWOM	<i>Mitigation Measure 4.1:</i> All bridges constructed over the Canal shall be required to obtain an encroachment permit from the Reclamation District 1000 (RD, 1000).	LTS				
	Mitigation Measure 4.2: Construction of pedestrian bridges and bridge foundations at the project site shall be prohibited from altering the Canal bed. Note: The Natomas Main Drainage Canal is a structure eligible for listing in the National Register of Historic Places due to its location, materials, and design. Any construction in the Canal bed will require a permit from the United States Army Corps of Engineers (PAR, 2004).					
	Mitigation Measure 4.3: The project applicant shall be required to acquire a permit(s), properly abandon and destroy all three onsite wells, and all three onsite septic systems in accordance with City and County standards for well and septic system abandonment.					
	Mitigation Measure 7.12: The applicant shall obtain a Section 1602 Streambed Alteration permit from the California Department of Fish and Game prior to construction of bridge footings, foundations, and trails on the Canal levees. Note: A streambed alteration permit does not allow construction to alter the Canal bed.					
	AIR QUALITY					
PSWOM	Mitigation Measure 5.1: This mitigation measure contains twelve emission reduction factors identified by the project applicant from the Sacramento Metropolitan Air Quality Management District Guide to Air Quality Assessment: Appendix E- Operational Emissions Mitigation, July 2004. Each of the listed items provides a credit to the project as an emissions reduction factor.	LTS				
	<ul> <li>The entire project is located within a ½ mile of an existing Class 1 or Class 2 bike land and provides a comparable bikeway connection to that existing facility.</li> <li>Setback distance is minimized between development and existing transit, bicycle, or pedestrian corridor.</li> </ul>					
	<ul> <li>Average residential density is seven dwelling units per acre or greater.</li> <li>Multiple and direct street routing (grid style).</li> <li>Mixed use has at least three of the following on site and/or within ¼ mile: residential development, retail development, personal services, open space, or</li> </ul>					

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	<ul> <li>Neighborhood serving as focal point with parks, school, and civic uses within ¼ mile.</li> </ul>	
	<ul> <li>Separate, safe, and convenient bicycle and pedestrian paths connecting residential, commercial, and office uses.</li> </ul>	
	<ul> <li>The project provides a development pattern that eliminates physical barriers such as walls, berms, landscaping, and slopes between residential and non- residential uses that impede bicycle or pedestrian circulation.</li> </ul>	
	<ul> <li>Install lowest emitting commercially available fireplaces. NOTE: All home in the project will have no fireplaces.</li> </ul>	
	<ul> <li>Install ozone destruction catalyst on air conditioning systems, in consultation with SMAQMD.</li> </ul>	
	<ul> <li>Comply with SMUD Advantage Plus (Tier III) or EPA/DOE Energy Star Home energy standards.</li> </ul>	
	<ul> <li>Include permanent Transportation Management Association membership and funding requirement. Funding to be provided by Community Facilities District or County Service Area or other non-revocable funding mechanism.</li> </ul>	
	Mitigation Measures 5.2, 5.3, 5.4, and 5.5 are the standard mitigations from in the Sacramento Metropolitan Air Quality Management District Guide to Air Quality Assessment: Appendix F- Construction Emissions Mitigations, July 2004.	
	Mitigation Measure 5.2: The project shall provide a plan for approval by the City of Sacramento and SMAQMD, demonstrating that the heavy-duty (>fifty horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average twenty percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction.	
	Mitigation Measure 5.3: The project applicant shall submit to the City of Sacramento and SMAQMD, a comprehensive inventory of all off-road construction equipment, equal to or greater than fifty horsepower, that will be used an aggregate of forty or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any thirty-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.	
	Mitigation Measure 5.4: The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed forty percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, the City of Sacramento and SMAQMD, shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any thirty-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles	

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations.	
	Mitigation Measure 5.5: Architectural coatings used in construction can be significant contributors of ROG, and wherever possible low-ROG and low-VOC architectural coating products shall be specified for use.	
	ADDITIONAL REQUIRED MITIGATION MEASURES	
	Mitigation Measure 5.6: The applicant shall pay fees to the Sacramento Metropolitan Air Quality Management District in the amount of \$58,309, or \$13,600 per ton of mitigated NOx emissions beyond the district NOx construction significance threshold, to compensate for the cost of providing vehicle retrofit equipment to reduce vehicle emissions within the district.	
	Mitigation Measure 5.7: The project shall be constructed in five separate phases as indicated in the project description. Any variation in the construction phasing must receive prior approval from the City of Sacramento and the Sacramento Metropolitan Air Quality District.	
	ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES - TRAFFIC/CIRCULATION	
	Measures will be discussed in EIR.	
	BIOLOGICAL RESOURCES	
PSWOM	Mitigation Measure 7.1: The project applicant/developer shall pay the one-time, up-front NBHCP fee based upon a ratio of 0.5 acres of mitigation land for every 1.0 gross acre of development which funds mitigation land acquisition and associated habitat enhancement, management, endowment, administration, monitoring, etc. Currently the fee is \$10,027 per developed acre; however, the land use agencies may adjust this fee as provided for in the NBHCP. Optionally, the applicant/developer may donate land to TNBC in lieu of payment of some or all of the acquisition component of the fee. In such cases, TNBC, USFWS, and CDFG will determine which lands are acceptable. The applicant/developer shall comply with Sacramento City Code 15.88.091 subsections A through D relating to NBHCP fees.	LTS
	<ul> <li>Mitigation Measure 7.2: As stated in Sacramento City Code 15.88.091 (D), the project applicant/developer shall execute an agreement, in a form acceptable to and approved by the City Attorney, that requires the applicant and its successors in interest to do the following:</li> <li>a. Comply with all provisions of the NBHCP;</li> <li>b. Comply with the Incidental Take Permit and the State Incidental Take Authorization issued in conjunction with the NBHCP;</li> <li>c. Pay all applicable fee increases and additions, whether adopted by the City before or within six months after issuance of the grading permit (but an applicant who has been specifically and expressly asked by the City manager or designee to pay HCP fees earlier than the date of issuance of a grading permit, and who in fact makes the requested early payment, shall not be subject to the "catch up" provision of this clause); and</li> <li>d. Release, defend, and fully indemnify the City and its officers, employees, and</li> </ul>	

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	agents from and against all costs and damages, including attorney's fees, that may arise in connection with the City's issuance of a grading permit to the applicant, including but not limited to claims (procedural or substantive) that relate to HCP fee increases adopted by the City and arise under California's Mitigation Fee Act (Title 7, Division 1 of the Government Code at Chapters 6, 7, 8, and 9).	
	Mitigation Measure 7.3: Not less than 30 days and not more than 6 months prior to commencement of construction activities on the project site, the applicant shall contract with a qualified biologist to conduct a pre-construction survey of the site to determine the status and presence of, and likely impacts to, all Covered Species and their habitat on the site. These species shall include giant garter snake, northwestern pond turtle, and Swainson's hawk. The results of the pre-construction surveys along with the recommended take minimization measures shall be documented in a report and submitted to the City of Sacramento, TNBC, USFWS and the CDFG. Note: Covered Species are defined as the Federally Protected Species, State Protected Species and the Other Species identified within Table I-1 in the NBHCP (22 species total).	
	Mitigation Measure 7.4: The project applicant/developer shall contract with a qualified biologist to conduct pre-construction nesting raptor surveys if construction is planned within the raptor nesting season (February-August). Surveys shall be conducted no more than 30 days prior to the commencement of construction, according to Department of Fish and Game guidelines. If an occupied raptor nesting is identified, the project applicant shall contact Department of Fish and Game to determine appropriate mitigation, which is dependent on species.	

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	Mitigation Measure 7.5: The project applicant/developer shall implement the following specific measures prior to ground disturbance and during construction to avoid, minimize and mitigate potential impacts to and reduce take of giant garter snake. These measures shall be included as notes on all project construction plans. (Note: The following represents measure V.A.5.a in the NBHCP.)	
	a. Within the Natomas Basin, all construction activity involving disturbance of habitat, such as site preparation and initial grading, is restricted to the period between May 1 and September 30. This is the active period for the giant garter snake and direct mortality is lessened, because snakes are expected to actively move and avoid danger.	
	b. Pre-construction surveys for giant garter snake, as well as other NBHCP Covered Species, must be completed for all development projects by a qualified biologist approved by USFWS. If any giant garter snake habitat is found within a specific site, the following additional measures shall be implemented to minimize disturbance of habitat and harassment of giant garter snake, unless such project is specifically exempted by USFWS.	
	c. Between April 15 and September 30, all irrigation ditches, Canals, or other aquatic habitat shall be completely dewatered, with no puddle water remaining, for at least 15 consecutive days prior to the excavation or filling in of the dewatered habitat. Make sure dewatered habitat does not continue to support giant garter snake prey, which could detain or attract snakes into the area. If a site cannot be completely dewatered, netting and salvage of prey items may be necessary. This measure removes aquatic habitat and allows giant garter snake to leave on theirown.	
	d. For sites that contain giant garter snake habitat, no more than 24-hours prior to start of construction activities (site preparation and/or grading), the project area shall be surveyed for the presence of giant garter snake. If construction activities stop on the project site for a period of two weeks, a new giant garter snake survey shall be completed no more than 24-hours prior to the re-start of construction activities.	
	e. Confine clearing to the minimal area necessary to facilitate construction activities. Flag and designate avoided giant garter snake habitat within or adjacent to the project as Environmentally Sensitive Areas. This area shall be avoided by all construction personnel.	
	f. Construction personnel completing site preparation and grading operations shall receive USFWS approved environmental awareness training. This training instructs workers on how to identify giant garter snakes and their habitats, and what to do if a giant garter snake is encountered during construction activities. During this training an on-site biological monitor shall be designated.	
	g. If a live giant garter snake is found during construction activities, immediately notify the USFWS and the project's biological monitor. The biological monitor, or his/her assignee, shall do the following:	
	(a) Stop construction in the vicinity of the snake. Monitor the snake and allow the snake to leave on its own. The monitor shall remain in the area for the remainder of the work day to make sure the snake is not harmed or if it leaves the site, does not return. Escape routes for giant garter snake shall be determined in advance of Construction and snakes shall always be allowed to leave on their own. If a giant garter snake does not leave on its own within 1 working day, farther consultation with USFWS is required.	

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	h. Upon locating dead, injured or sick threatened or endangered wildlife species, the Permittees or their designated agents must notify within 1 working day the Service's Division of Law Enforcement (2800 Cottage Way, Sacramento CA 95825) or the Sacramento Fish and Wildlife Office (2800 Cottage Way, Room W-2605, Sacramento, CA 95825, telephone 916-414-6600). Written notification to both offices must be made within 3 calendar days and must include the date, time, and location of the finding of a specimen and any other pertinent information.	
	i. Fill or construction debris may be used by giant garter snake as an overwintering site. Therefore, upon completion of construction activities remove any temporary fill and/or construction debris from the site. If this material is situated near undisturbed giant garter snake habitat and it is to be removed between October 1 and April 30, it shall be inspected by a qualified biologist to assure that giant garter snake are not using it as hibernaculae.	
	j. No plastic, monofilament, jute, or similar erosion control matting that could entangle snakes will be placed on a project site when working within 200 feet of snake aquatic or rice habitat. Possible substitutions include coconut coir matting, tactified hydroseeding compounds, or other material approved by the Wildlife Agencies.	
	k. Fences will be constructed along the shared boundary of urban development and the North Drainage Canal and the East Drainage Canal within Sutter's Permit Area, subject to the following guidelines:	
	(a) A minimum of 100 feet will be provided from fence-to-fence and access to the Canals shall be limited by gates.	
	(b) A snake deterrent will be placed along the fences on the North Drainage Canal and the East Drainage Canal (i.e., fence construction that restricts snake movement or an appropriate vegetative barrier either inside or outside of the boundary fence). The design of the deterrent shall be subject to approval by the Wildlife Agencies.	
	(c) The specific fence/snake barrier design adjacent to a given development will be determined within Sutter County's review of the proposed development and the fence/barrier shall be installed immediately alter site is completed.	
	At the time of urban development along the North and East Drainage Canals, Sutter shall consult with the Wildlife Agencies to determine design strategies that would enhance conditions for giant garter snake movement through the North and East Drainage Canals. Possible strategies may include expanded buffer areas and modified Canal cross sections if such measures are, in the determination of Sutter and the Water Agencies, found to be feasible.	

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	Mitigation Measure 7.6: The project applicant/developer shall implement the following specific measures to avoid, minimize and mitigate potential impacts to and reduce take of <b>northwestern pond turtle</b> . These measures shall be included as notes on all project construction plans. (Note: The following represents measure V.A.5.j in the NBHCP.)	
	1) Take of the northwestern pond turtle as a result of habitat destruction during construction activities, including the removal of irrigation ditches and drains, and routine ditch and drain maintenance, will be minimized by the dewatering requirement described above (Mitigation Measure 7.5) for giant garter snake.	
	Mitigation Measure 7.7: The project applicant/developer shall implement the following specific measures to avoid, minimize and mitigate potential impacts to and reduce take of <b>Swainson's hawk</b> . These measures shall be included as notes on all project construction plans. (Note: The following represents measure V.A.5.b in the NBHCP.)	
	MEASURES TO REDUCE CUMULATIVE IMPACTS TO FORAGING HABITAT	
	1) To maintain and promote Swainson's hawk habitat values, Sutter County will not obtain coverage under the NBHCP and incidental take permits, nor will Sutter County grant Urban Development Permit approvals, for development on land within the one-mile wide Swainson's Hawk Zone adjacent to the Sacramento River. The City of Sacramento has limited its Permit Area within the Swainson's Hawk Zone to the approximately 252 acres located within the North Natomas Community Plan that was designated for urban development in 1994 and, likewise, will not grant development approvals within the Swainson's Hawk Zone beyond this designated 252 acres. It should be noted that of these 252 acres of land in the Swainson's Hawk Zone, about 80 acres will be a 250 foot wide agricultural buffer along the City's side of Fisherman's Lake. Should either the City or the County seek to expand NBHCP coverage for development within the Swainson's Hawk Zone beyond that described above, granting of such coverage would require an amendment to the NBHCP and permits and would be subject to review and approval by the USFWS and the CDFG in accordance with all applicable statutory and regulatory requirements.	
	2) Because the effectiveness of the NBHCP's Operating Conservation Program (OCP) adequately minimizes and mitigates the effects of take of the Swainson's hawk depends substantially on the exclusion of future urban development from the City's and Sutter County's portion of the Swainson's Hawk Zone, approval by the City of future urban development (i.e., uses not consistent with Agricultural Zoning) in the zone beyond the 170 (252 acres minus 80) acres identified above or approval by Sutter of any future urban development in the Swainson's Hawk Zone would constitute a significant departure from the Plan's OCP and would trigger are evaluation of the City's and/or Sutter's Permits and possible suspension or revocation of the City's and/or County's permits.	
	MEASURES TO REDUCE NEST DISTURBANCE	
	1) Prior to the commencement of development activities at any development site within the NBHCP area, a pre-construction survey shall be completed by the respective developer to determine whether any Swainson's hawk nest trees will be removed on-site, or active Swainson's hawk nest sites occur on or within ½ mile of the development site. These surveys shall be conducted according to the Swainson's Hawk Technical Advisory Committee's (May 31, 2000) methodology or updated methodologies, as approved by the Service and CDFG, using experienced Swainson's	

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	hawk surveyors.	
	2) If breeding Swainson's hawks (i.e. exhibiting nest building or nesting behavior) are identified, no new disturbances (e.g., heavy equipment operation associated with construction) will occur within ½ mile of an active nest between March 15 and September 15, or until a qualified biologist, with concurrence by CDFG, has determined that young have fledged or that the nest is no longer occupied. If the active nest site is located within ¼ mile of existing urban development, the no new disturbance zone can be limited to the ¼ mile versus ½ mile. Routine disturbances such as agricultural activities, commuter traffic, and routine facility maintenance activities within ½ mile of an active nest are not restricted.	
	3) Where disturbance of a Swainson's hawk nest cannot be avoided, such disturbance shall be temporarily avoided (i.e., defer construction activities until after the nesting season) and then, if unavoidable, the nest tree may be destroyed during the nonnesting season. For purposes of this provision the Swainson's hawk nesting season is defined as March 15 to September 15. If a nest tree (any tree that has an active nest in the year the impact is to occur) must be removed, tree removal shall only occur between September 15 and February 1.	
	4) If a Swainson's hawk nest tree is to be removed and fledglings are present, the tree may not be removed until September 15 or until the California Department of Fish and Game has determined that the young have fledged and are no longer dependent upon the nest tree.	
	5) If construction or other project related activities which may cause nest abandonment or forced fledgling are proposed within the ¼ mile buffer zone, intensive monitoring (funded by the project sponsor) by a Department of Fish and Game approved raptor biologist will be required. Exact implementation of this measure will be based on specific information at the project site.	
	MEASURES TO PREVENT THE LOSS OF NEST TREES	
	1) Valley oaks, tree groves, riparian habitat and other large trees will be preserved wherever possible. The City and Sutter County shall preserve and restore stands of riparian trees used by Swainson's hawks and other animals, particularly near Fisherman's Lake and elsewhere in the Plan Area where large oak groves, tree groves and riparian habitat have been identified in the Plan Area.	
	2) The raptor nesting season shall be avoided when scheduling construction near nests in accordance with applicable guidelines published by the Wildlife Agencies or through consultation with the Wildlife Agencies.	

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	MEASURES TO MITIGATE THE LOSS OF SWAINSON'S HAWK NEST TREES	
	1) The NBHCP will require 15 trees (five gallon container size) to be planted within the habitat reserves for every Swainson's hawk nesting tree anticipated to be impacted by Authorized Development. It will be the responsibility of each Land Use Agency approving development that will impact Swainson's hawk nest trees to provide funding from the applicable developer for purchase, planting, maintenance and monitoring of trees at the time of approval of each Authorized Development project. TNBC shall determine the appropriate cost for planting, maintenance and monitoring of trees.	
	2) The Land Use Agency Permittee approving a project that impacts an existing Swainson's hawk nest tree shall provide funding sufficient for monitoring survival success of tree for a period of 5 years. For every tree lost during this time period, a replacement tree must be planted immediately upon the detection of failure. Trees planted to replace trees lost shall be monitored for an additional 5-year period to ensure survival until the end of the monitoring period. A 100% success rate shall be achieved. All necessary planting requirements and maintenance (i.e., fertilizing, irrigation) to ensure success shall be provided. Trees must be irrigated for a minimum of the first 5 years after planting, and then weaned off the irrigation in an approximate 2-year period. If larger stock is planted, the number of years of irrigation must be increased accordingly. In addition, 10 years after planting, a survey of the trees shall be completed to assure 100% establishment success. Remediation of any dead trees shall include completion of the survival and establishment process described.	
	3) Of the replacement trees planted, a variety of native tree species will be planted to provide trees with differing growth rates, maturation, and life span. This will ensure that nesting habitat will be available quickly (5-10 years in the case of cottonwoods and willows), and in the long term (i.e., valley oaks, black walnut and sycamores), and minimize the temporal losses from impacts to trees within areas scheduled for development within the 50-year permit life. Trees shall be sited on reserves in proximity to hawk foraging areas. Trees planted shall be planted in clumps of 3 trees each. Planting stock shall be a minimum of 5-gallon container stock for oak and walnut species.	
	4) In order to reduce temporary impacts resulting from the loss of mature nest trees, mitigation planting shall occur within 14 months of approval of the NBHCP and ITP's. It is estimated at this time that 4 nesting trees within the City of Sacramento are most likely to be impacted by Authorized Development in the near term. Therefore, in order to reduce temporal impacts, the City of Sacramento will advance funding for 60 sapling trees of diverse, suitable species (different growing rates) to TNBC within the above referenced 14 months. It is anticipated that the City will recover costs of replacement nest trees as an additional cost to be paid by private developers at the time of approval of their development projects that impact mature nest trees.	
	5) For each additional nesting tree removed by Land Use Agencies' Covered Activities, the Land Use Agency shall fund and provide for the planting of 15 native sapling trees of suitable species with differing growth rates at suitable locations on TNBC preserves. Funding for such plantings shall be provided by the applicable Permittee within 30 days of approving a Covered Activity that will impact a Swainson's hawk nesting tree.	

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	Mitigation Measure 7.8: The applicant/property owner shall be responsible for adhering to the protection and maintenance responsibility measures for Heritage Trees as outlined in Sacramento City Code 12.64.050 and 12.64.050.	
	Mitigation Measure 7.9: Prior to any construction or grading on the project site, the applicant/property owner shall consult with the Sacramento City Arborist and acquire a permit from the Director in order to conduct any activities affecting Heritage Trees (as defined by Sacramento City Code 12.64.020). Activities affecting Heritage Trees include removal, pruning of any segment greater than twelve (12) inches in circumference or the placement of any chemical or other deleterious substance by spray, and disturbing the soil or placing any chemical or other deleterious substance or material on the soil within the drip line area (City Code 12.64.050).	
	Mitigation Measure 7.10: The tree protection methods listed below shall be implemented, including during grading and construction for the pedestrian bridge, by the applicant/developer and shall be identified on all site construction plans for the project.	
	1) Prior to the issuance of demolition/grading permits a 6 foot chain link fence shall be installed around the dripline of trees within the construction area. The dripline is an imaginary line on the ground directly below the outermost tips of the branches. Orange plastic fencing is acceptable but not recommended because it does not stand up to construction activity and is easily removed. The fencing shall remain in place for the duration of the project except for the temporary removal required to replace existing curb, gutter, and sidewalk.	
	2) No excavation for utilities, trenching, grade changes, storage of materials or parking of vehicles shall be allowed within the fenced area. Boring or hand trenching for utilities shall be allowed within the fenced area under the supervision of the project arborist.	
	3) The contractor shall hire an International Society of Arboriculture (ISA) certified arborist to do any required pruning for building or equipment clearances. The arborist will also perform any root inspections.	
	4) If during excavation for the project or for any necessary sidewalk, curb, gutter repair or driveway construction, tree roots greater than two inches in diameter are encountered work shall stop immediately until project arborist can perform an on-site inspection. All roots shall be cut clean and the tree affected may require supplemental irrigation/fertilization and pruning as a result of root pruning.	
	The contractor shall be held liable for any damage to existing trees. i.e. trunk wounds, broken limb, pouring of any deleterious materials, or washing out concrete under the drip line of the tree. Damages will be assessed using the "Guide to Plant Appraisal" ninth edition published by the ISA. The project arborist will submit a report to the property owner for review.	
	Mitigation Measure 7.11: The applicant/property owner shall design, construct, and implement the pedestrian bridges over the Main Drainage Canal so that all parts of each bridge (including footings and foundations) as well as construction activity during grading and installation shall stay outside of the ordinary high water mark of the Canal. The ordinary high water mark shall be delineated on all construction level drawings and plans. In addition, all construction level drawings and plans for the	

Significance before Mitigation	Mitigation Measure(s)								
	pedestrian bridges shall be approved by the City Development Services Department prior to construction of each bridge. Note: Non-conformance with this measure would require the applicant/developer to acquire Section 401 Nationwide Permit(s) from the Army Corps of Engineers and a Section 404 Water Quality Certification from the Regional Water Quality Control Board.								
	Mitigation Measure 7.12: The applicant/property owner shall obtain a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Game prior to construction of bridge footings, foundations, and trails on the Natomas Main Drainage Canal levees. Note: A Streambed Alteration Agreement would not allow construction to alter the Canal bed (refer to Mitigation Measures 4.5 and 14.3).								
	Energy								
PSWOM	Mitigation Measure 8.1: The applicant shall follow City of Sacramento Energy Conservation Review Checklist and Development Guidelines for project and site plan review.	LTS							
	Mitigation Measure 8.2: The developer shall consult with the Sacramento Municipal Utility District's (SMUD), New Construction Service Staff and incorporate SMUD energy conservation recommendations into the project.								
	HAZARDS								
PSWOM	Mitigation Measure 9.1: Excavations or any sampling activities that come within 10 feet of groundwater shall require a permit from the Sacramento County Environmental Management Department, Hazardous Materials Division (HMD). Any ground cuts associated with project development shall avoid contamination of groundwater.								
	Mitigation Measure 9.2: Hazardous materials used during implementation of the project which exceed the established reportable quantity must be reported to the HMD. A Hazardous Materials Plan (HMP) must be filed with HMD. The reportable quantity of hazardous materials is as follows:								
	■ 55 gallons or more of a hazardous material in liquid state;								
	<ul><li>200 cubic feet or more of a compressed gas;</li><li>500 pounds or more of a hazardous material in a solid state.</li></ul>								
	In addition, any hazardous waste generated by the construction and operation of this project would require a hazardous waste generator permit from HMD. A permit can be obtained by completing a HMP with HMD.								
	Mitigation Measure 9.3: All potentially hazardous materials and fuel supplies shall be stored on pallets in fenced and secured construction areas to protect them from exposure to weather, incidents of theft, and prevent accidental exposure to people. Incompatible materials shall be stored in separate areas as appropriate.								
	Mitigation Measure 9.4: Equipment refueling and maintenance shall take place only within designated staging areas prepared to minimize and contain potential spills of fuels, oils, and hazardous substances.								
	Mitigation Measure 9.5: Hazardous or contaminated materials may only be								

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	removed and disposed from the project site in accordance with the following regulations and requirements:	
	A. Chapter 6.5, Division 20, California Health and Safety Code.	
	California Administration Code, Title 22 relation to Handling, storage, and transfers of hazardous Materials.	
	City of Sacramento Building Code and the Uniform Building Code, 1994 edition.	
	B. Coordination shall be made with the County of Sacramento Environmental Management Department, Hazardous Materials Division, and the necessary applications shall be filed.	
	C. All hazardous materials shall be disposed of at an approved disposal site and shall only be hauled by a current California registered hazardous waste hauler using correct manifesting procedures and vehicles displaying a current Certificate of Compliance. The developer shall identify by name and address the site where toxic substances shall be disposed of. No payment for removal and disposal services shall be made without a valid certificate from the approved disposal site that the material was delivered.	
	D. None of the aforementioned provisions shall be construed to relieve the developer from the developer's responsibility for the health and safety of all persons (including employees) and from the protection of property during the performance of the work. This requirement shall be applied continuously and not be limited to normal working hours.	
	Mitigation Measure 9.6: The applicant shall prepare a traffic management plan, a construction schedule, and comply with the City's noticing procedures regarding timing and impacts of construction related activities on the affected roadways. The developer will use lane reductions instead of closures or detours. Construction will be scheduled to limit traffic interruptions. The police and fire departments shall be kept informed of construction activities for use in planning emergency response routing. The traffic management plan and construction schedule shall be approved by the City Fire Department.	
	Mitigation Measure 9.7: A hazardous materials inspector shall be present during demolition and removal of the existing buildings, storage, foundations, and debris field. If hazardous materials are encountered during demolition and removal, work shall be required to stop until an assessment of the hazard has been made and a plan of action determined.	
	Removal of hazardous materials shall be conducted in compliance with Chapter 6.5, Division 20, California Health and Safety Code; California Administration Code, Title 22 relation to Handling, storage, and transfers of hazardous Materials; City of Sacramento Building Code and the Uniform Building Code, 1994 edition.	
	Mitigation Measure 9.8: The water quality basin may be enclosed with fencing or post and cable The fencing may be decorative in nature and shall comply with City standards.	
	Mitigation Measure 9.9: Removal of vegetation shall be implemented in a timely manner to reduce the potential for fire hazard.	
	Mitigation Measure 9.10: The developer shall take necessary precautions to	

Significance before Mitigation	Mitigation Measure(s)								
	ensure that defensible space between vegetated areas and the construction site are maintained as required by the State Fire Code. The developer shall also ensure a clear space of at least ten feet shall be maintained between piles of cleared vegetation while in the interim of removing the vegetation.								
	Noise								
PSWOM	Mitigation Measure 10.1: Construction activities shall adhere to City of Sacramento policies with respect to hours of operation, internal combustion engines shall be equipped with suitable exhaust and intake silencers which are in good working order, and other factors which affect construction noise generation and it's effects on noise-sensitive land uses.	LTS							
	Mitigation Measures 10.2: Noise barriers shall be constructed at the Interstate 80 and West El Camino Avenue Right of Way to reduce future traffic noise to more acceptable levels. An analysis of noise barrier performance was conducted for this project and the results are provided below in Table 10.6. The Table 10.6 data indicate that the construction of a noise barrier 14 feet in height along I-80 would reduce future traffic noise levels to approximately 65 dB Ldn at the exterior spaces of the residences located closest to that roadway. This level is within the conditionally acceptable range of 60 to 70 dB Ldn for new residential uses, and is consistent with barrier design for other newly constructed residential developments adjacent to this highway.								
	Mitigation Measure 10.3: Following construction of the noise barriers recommended in Mitigation Measure 10.2, 1st floor building facades would be substantially shielded from I-80 traffic noise. As a result, future traffic noise levels within the first floor rooms of residences constructed nearest that roadway are predicted to be approximately 40 dB Ldn. This level is considered acceptable noise exposure for interior spaces of new residential developments. As a result, no improvements over standard construction would be required for the first floor facades nearest to I-80. Due to the lower predicted future traffic noise levels on West El Camino Avenue, a similar conclusion is reached regarding standard building construction for homes proposed near that roadway.								
	The second floor facades of the residences constructed nearest to I-80 would not be completely shielded from view of that roadway by the barrier recommended in Mitigation Measure 10.2. As a result, future plus project traffic noise levels at second floor facades of the residences constructed nearest to I-80 are estimated to be approximately 78 dB Ldn. Based on this level, a building facade noise level reduction of 33 dB would be required to achieve satisfaction of the City's 45 dB Ldn interior noise level standard. Because standard construction practices only provide about 25 dB of traffic noise reduction, the following additional measures are recommended to ensure satisfaction of the City's interior noise level standards.								
	All second floor bedroom windows within 125 feet of the I-80 Right of Way shall have a minimum Sound Transmission Class Rating of 33.								
	All second floor bedroom windows between 125 and 250 feet of the I-80 Right of Way shall have a minimum Sound Transmission Class Rating of 30.								
	The exterior building facades of all residences constructed within 250 feet of the I-80 Right of Way shall be constructed of stucco.								
	Air conditioning shall be provided for all residences within this development								

Significance before Mitigation	Mitigation Measure(s)						
	to allow occupants to close doors and windows as desired to achieve additional acoustical isolation.						
	For all residences constructed within 250 feet of the I-80 right-of-way, all exterior doors shall be fully weather-stripped and all exterior penetrations shall be fully sealed around their perimeters.						
	Public Services						
	None						
	UTILITIES						
PSWOM	Mitigation Measure 12.1: The project applicant shall provide a project sewer study prepared by a qualified engineer. The sewer study shall contain detailed drawings and information regarding the onsite conveyance system and the existing sewer trunk lines in Orchard Lane. The study shall include provisions for access and maintenance easements as per County Sanitation District 1 (CSD-1) standards. The study shall also meet the approval of the City of Sacramento Department of Utilities and the CSD-1 prior to issuance of a building permit.						
	Mitigation Measure 12.2 The project applicant shall prepare a construction material recycling program for the construction site including glass, wood, cardboard, paper, glass, and metals.						
	AESTHETICS, LIGHT, AND GLARE						
PSWOM	Mitigation Measure 13.1: Lighting in project parks and residential areas shall be designed and oriented as not to produce hazardous and annoying glare to motorists on Interstate 80 and West El Camino Avenue, or to occupants of buildings and residents on adjacent properties.	LTS					
	Mitigation Measure 13.2: Lighting shall be oriented away from adjacent properties and not produce a glare or reflection or any nuisance, inconvenience or hazardous interference of any kind on adjoining streets or property.						
	Mitigation Measure 13.3: Building materials and glass used in construction oriented towards Interstate 80 and West El Camino shall have non-reflective, or low-glare properties.						
	Mitigation Measure 13.4: The project will be required to participate in a landscape district, or adopt landscape standards in the project Covenants, Conditions, and Restrictions (CC&Rs).						
	CULTURAL RESOURCES						
PSWOM	Mitigation Measure 14.1: If subsurface archaeological or historical remains are discovered during construction, work in the area shall stop immediately and a qualified archaeologist and a representative of the Native American Heritage Commission shall be consulted to develop, if necessary, further mitigation measures to reduce any archaeological impact to a less-than-significant level before construction continues.	LTS					
	Mitigation Measure 14.2: If human burials are encountered, all work in the area						

Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation		
	shall stop immediately and the Sacramento County Coroner's office shall be notified immediately. If the remains are determined to be Native American in origin, both the Native American Heritage Commission and any identified descendants must be notified and recommendations for treatment solicited (CEQA Section 15064.5); Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and 5097.98.			
	Mitigation Measure 14.3: If the proposed design of either pedestrian bridge or any changes to the project are proposed that would have the potential to change or alter the structure of the Natomas Main Drainage Canal, including the lining of the Canal, or would adversely affect the Canal's eligibility for inclusion on the National Register as a component of the RD 1000 Rural Historic Landscape District, additional evaluation of the project effect and consultation with the California State Preservation Officer (SHPO) would be required. Additional mitigation measures may be required by SHPO to resolve adverse project effects.			
RECREATION				
	None			

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# **CHAPTER 4**

# ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES TRAFFIC AND CIRCULATION

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# Introduction

This EIR chapter evaluates the traffic impacts of the proposed River Oaks Park project in Sacramento, California. The chapter includes an analysis of traffic operations in the project vicinity under the baseline conditions and cumulative (Year 2025) conditions. The impacts of the Alternatives to the Proposed Project are qualitatively analyzed in a separate section.

The traffic impact analysis provided in this EIR chapter is based on a September 2004 traffic study prepared by Dowling Associates, Inc. The study, which is available for review at the City of Sacramento, was prepared based on a previous version of the tentative map, which proposed a total of 708 residential units. Revisions to the tentative map reduced the number of residential units to 642. Therefore, the analysis presented below is expected to slightly overestimate the impacts of the project.

# **Project Description**

The Proposed Project consists of a proposed residential development with 708 single-family residential dwelling units. It is located on a 80.33-acre site in the northwest corner of West El Camino Avenue and the Main Drainage Canal. The site is bounded by West El Camino Avenue on the south, Orchard Lane on the west, Interstate 80 on the north, and the RD 1000 Natomas Main Drainage on the east (Figure 1: Project Location).

Access to the site would be provided from West El Camino Avenue via Orchard Lane, the Proposed River Oaks Drive, and the Proposed East Project Driveway. An emergency access connecting the project to West El Camino Avenue is also proposed at the eastern boundary.

# **Environmental Settings: The Existing Roadways**

The existing roadway, transit, bicycle and pedestrian components of the traffic system within the study area are described below.

### **Regional Access**

Regional automobile access to the site is provided primarily by Interstate 80 (I-80) and Interstate 5 (I-5). Access to and from I-80 is provided at West El Camino Avenue (about 0.5 mile west of the site). Access to and from I-5 is also provided at West El Camino Avenue (about 0.5 mile east of the site).

#### **Study Area Roadways**

West El Camino Avenue: At the time of this traffic impact analysis, the 'West El Camino Avenue Widening and Bridge Replacement Project' was under construction. The West El Camino Avenue Widening project is bounded by Interstate 80 eastbound ramps on the west and Natomas Main Drainage canal on the east. The widening project would consist of widening West El Camino Avenue between Orchard Lane and Natomas Main Drainage Canal from a 2-lane road to a 4-lane road, and other associated improvements such as replacing an existing 2-lane bridge over Natomas Main Drainage Canal with a new 4-lane bridge, some widening on eastbound West El Camino Avenue between EB I-80 off-ramp and Orchard Lane, including modification/expansion of the intersection of West El Camino Avenue and Orchard Lane.

Orchard Lane: a 2-lane, north-south collector roadway that extends from Garden Highway to just north of West El Camino Avenue.

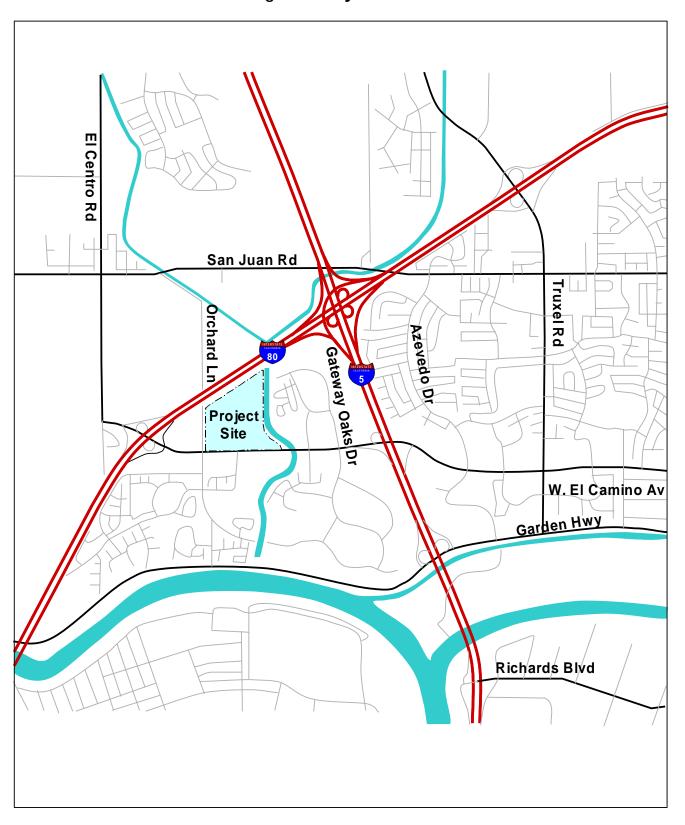
Gateway Oaks Drive: a north-south street that runs from Garden Highway and terminates at the East Main Drainage Canal located east of the project site. It is a 4-lane road between Garden Highway and just north of West El Camino Avenue. It becomes a 2-lane unmarked road north of West El Camino Avenue.

West River Drive: a north-south street located south of the project site. West River Drive is a 2-lane L-shape street that connects West El Camino Avenue and Orchard Lane. West River Drive continues to the west of Orchard Lane and terminates near Interstate 80.

#### **Transit Service**

Sacramento Regional Transit (RT) provides two regional bus lines near the project site. Route 88 provides service from West El Camino Avenue and Gateway Oaks Drive to downtown Sacramento. Service is provided on an hourly basis. Route 89 services a similar route as Route 88, except that it serves a larger area, circulating near the office buildings north of West El amino Avenue along Gateway Oaks Drive and Weald Way. It is only in service during peak hours. During the morning peak hours, Route 89 provides service from downtown Sacramento to Gateway Oaks Drive every 40 minutes. In the afternoon peak hours, Route 89 provides service in the reverse direction in a 35-minute interval. Figure 2 presents the Existing and Planned Transit Routes.

Figure 1. Project Location



#### **Bicycle and Pedestrian System**

Bicycle facilities are addressed in the 2010 Bikeway Master Plan developed by the Sacramento City/County Bicycle Task Force. The Master Plan is a policy document that was prepared to coordinate and develop a bikeway system that will benefit and serve the recreational and transportation needs of the public. Officially designated bicycle facilities are classified as follows:

- Class I: Off-street bike trails or paths that are physically separated from streets or roads used by motorized traffic.
- Class II: On-street bike lanes with signs, striped lane markings and pavement legends.
- Class III: On-street bike routes marked by signs and shared with motor vehicles and pedestrians.

In the vicinity of the proposed project site, a Class I off-street bike-pedestrian trail exists along the east side of Natomas Main Drainage Canal. The 2010 Bikeway Master Plane contains a proposed off-street bike-pedestrian trail along the west side of the canal, and Class II on-street bicycle facility on West El Camino Avenue along the project site, the existing Orchard Lane, and the future extension of Gateway Oaks Drive. Class II on-street bike lanes are being provided along the widened sections of West El Camino Avenue.

The West El Camino Avenue Widening Project would include the construction of an 8-foot sidewalk between Interstate 80 and just east of the Main Drainage Canal.

Figure 3 shows the Existing and Planned Bike Routes under the 2010 Bikeway Master Plan.

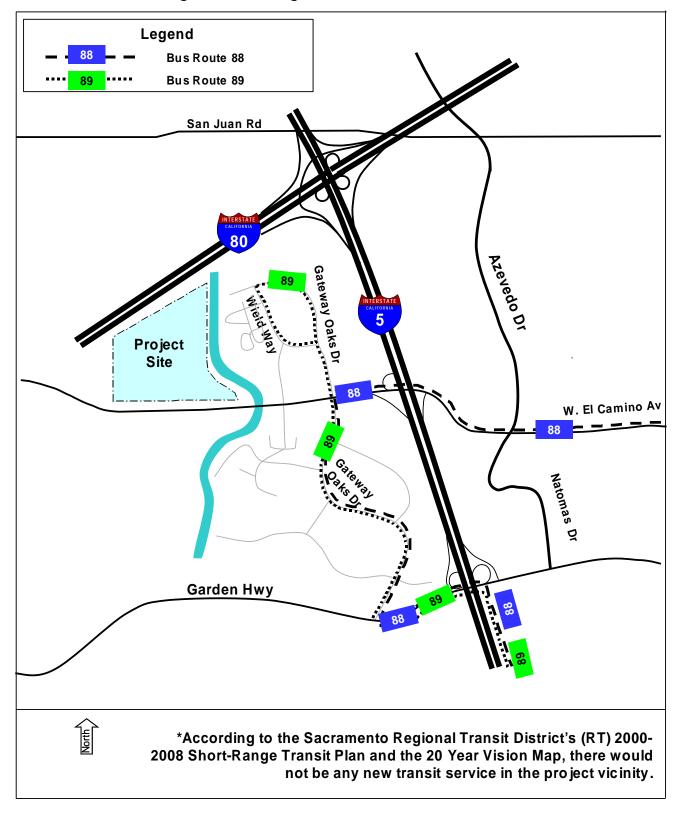
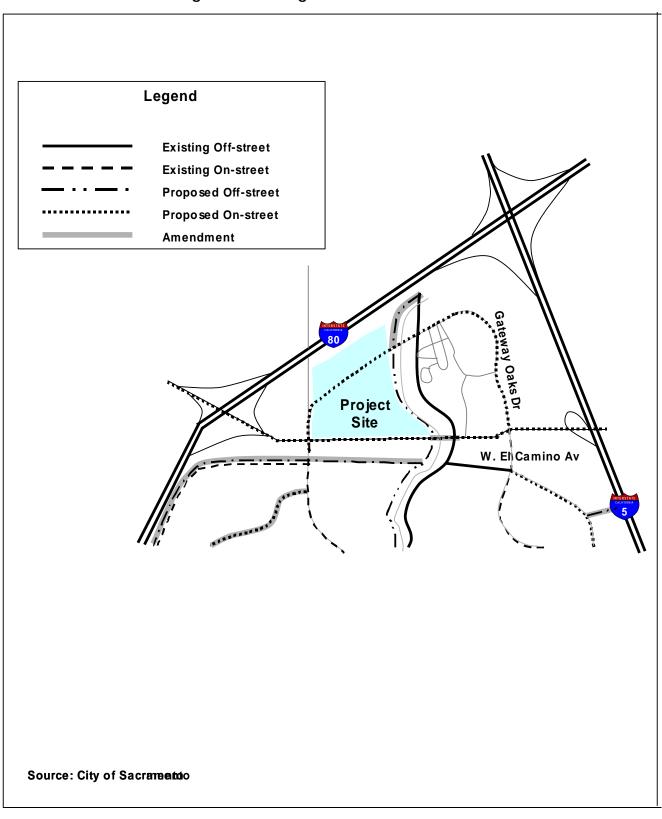


Figure 2. Existing and Planned\* Transit Routes

Figure 3. Existing and Planned Bike Routes



# Study Area

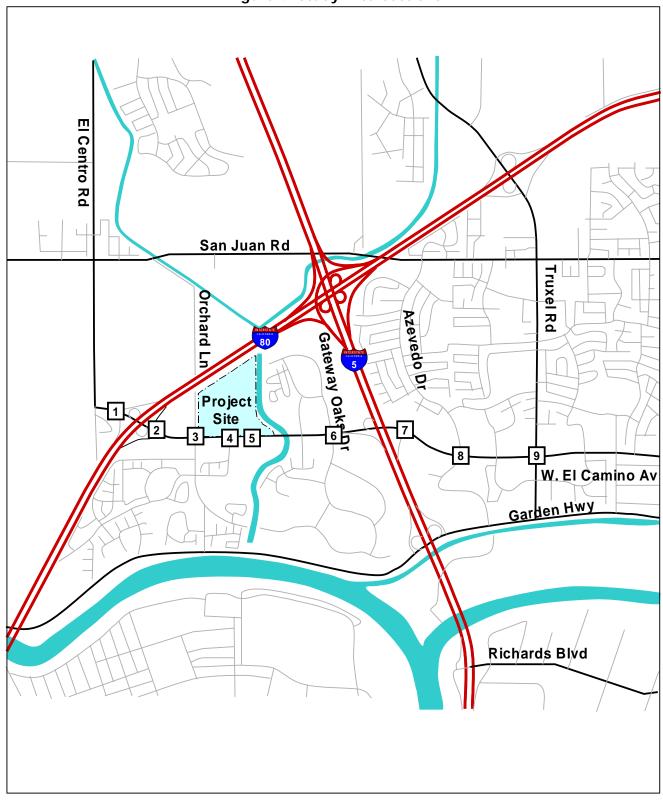
A set of intersections, street segments, and freeway off-ramps were selected for study based upon the anticipated volume and distributional patterns of project traffic and known locations of operational difficulty. This selection was made in collaboration with the City of Sacramento Development Services Department staff. The following locations (Figure 4) were studied:

#### Intersections

- 1. West El Camino Avenue / Interstate 80 Westbound Off-Ramp
- 2. West El Camino Avenue / Interstate 80 Eastbound Off-Ramp
- 3. West El Camino Avenue / Orchard Lane
- 4. West El Camino Avenue / West River Drive / River Oaks Way (Proposed)
- 5. West El Camino Avenue / East Project Driveway (Proposed)
- 6. West El Camino Avenue / Gateway Oaks Drive
- 7. West El Camino Avenue / Interstate 5 Northbound Off-Ramp
- 8. West El Camino Avenue / Azevedo Drive
- 9. West El Camino Avenue / Truxel Road

#### Street Segments

- 1. West El Camino Avenue from El Centro Road to Interstate 80 Westbound Ramps
- 2. West El Camino Avenue from Interstate 80 Eastbound Ramps to Orchard Lane
- 3. West El Camino Avenue from Orchard Lane to River Oaks Way (Proposed) / West River Drive
- 4. West El Camino Avenue from River Oaks Way (Proposed) / West River Drive to East Project Driveway (Proposed)
- 5. West El Camino Avenue from East Project Driveway (Proposed) to Grasslands Way
- 6. West El Camino Avenue from Grasslands Way to Gateway Oaks Drive
- 7. West El Camino Avenue from Gateway Oaks Drive to Interstate 5 Southbound Ramps



**Figure 4. Study Intersections** 

- 8. West El Camino Avenue from Interstate 5 Northbound Ramps to Azevedo Drive
- 9. Orchard Lane north of West El Camino Avenue
- 10. Riverdale Drive (Proposed) east of Orchard Lane
- 11. Riverdale Drive (Proposed) from River Oaks Way (Proposed) to East Terminal (near East Main Drain Canal)
- 12. River Oaks Way (Proposed) north of West El Camino Avenue

#### Freeway Ramps

- 1. Interstate 80 Westbound Off-Ramp to West El Camino Avenue
- 2. Interstate 80 Eastbound Off-Ramp to West El Camino Avenue
- 3. Interstate 5 Northbound Off-Ramp to West El Camino Avenue

#### **Existing Traffic Volumes**

Turning traffic volume counts were conducted at the study intersections during the AM and PM peak periods (7:00 to 9:00 AM and 4:00 to 6:00 PM) in October 2003. The traffic counts at the West El Camino Avenue and West River Drive intersection was conducted in August 2004 in accordance with the revisions to the currently Proposed Project. The existing traffic volumes are utilized to develop the Baseline traffic conditions as discussed later in the section.

# **Regulatory and Planning Context**

Roadway operations are regulated by agencies with jurisdiction of a particular roadway. In the study area, the interstate freeways are under the jurisdiction of the California Department of Transportation (Caltrans). The non-freeway roadways are under the jurisdiction of the City of Sacramento.

The City of Sacramento General Plan (October 1987) outlines the goals and policies that coordinate the traffic and circulation system with planned land uses. The General Plan (Goal D, Street and Road section) identifies LOS C as the goal for City's local and major street system. In addition, the General Plan smart growth principles identify the need for a balanced transportation system, including walkability and improved bicycle infrastructure. The current LOS C goal is being reexamined as part of the upcoming General Plan update. The revised policy is expected to recognize alternative mode opportunities, support developments in infill areas and near transit stations.

The City's pedestrian friendly *Street Standards* (adopted *in February 2004*) provide guidelines on conceptual street standards to enhance and improve

the pedestrian environment and encourage alternate mode use in the City of Sacramento. The key elements of the standards are listed below:

- Eliminate rolled curb
- Provide separated sidewalks on all streets
- Reduce widths of collector and arterial streets
- Reduce travel lane widths
- Add bike lanes to all new collector and arterial streets

# Analysis Methodology

#### Level of Service

Level of service (LOS) describes the operating conditions experienced by motorists. LOS is a qualitative measure of the effect of a number of factors, including speed and travel time, traffic interruptions, freedom to maneuver, driving comfort and convenience. LOS are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that might occur. LOS A represents essentially free-flow conditions, and LOS F indicates substantial congestion and delay.

Existing traffic policies, laws, and regulations that would apply to traffic elements in context of City of Sacramento are summarized below.

### **Signalized Intersection Analysis**

Signalized intersection analyses were conducted using the operational methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, Washington D.C., 2000, Chapters 10 and 16). This procedure calculates an average stopped delay per vehicle at a signalized intersection, and assigns a level of service designation based upon the delay. The method also provides a calculation of the volume-to-capacity (v/c) ratio of the critical movements at the intersection. Table 1 shows level of service criteria for signalized intersections.

# **Unsignalized Intersection Analysis**

Stop sign controlled intersections were analyzed utilizing the methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, Washington D.C., 2000, Chapters 10 and 17). This methodology determines the Level of Service by calculating an average total delay per vehicle for each controlled movement and for the intersection as a whole. A LOS designation is assigned based upon the average total delay of all movements. Table 2 presents the relationship of total delay to level of service for stop sign controlled intersections.

**Table 1: Level of Service Criteria – Signalized Intersections** 

Level of Service (LOS)	Average Delay (seconds / vehicle)	Description
A	≤ 10	Very Low Delay: This level of service occurs when progression is extremely favorable and most vehicles arrive during a green phase. Most vehicles do not stop at all.
В	> 10 and < 20	Minimal Delays: This level of service generally occurs with good progression, short cycle lengths, or both. More vehicles stop than at LOS A, causing higher levels of average delay.
С	> 20 and < 35	Acceptable Delay: Delay increases due to only fair progression, longer cycle lengths, or both. Individual cycle failures (to service all waiting vehicles) may begin to appear at this level of service. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	> 35 and < 55	Approaching Unstable Operation/Significant Delays: The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume / capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
Е	> 55 and < 80	Unstable Operation/Substantial Delays: These high delay values generally indicate poor progression, long cycle lengths, and high volume / capacity ratios. Individual cycle failures are frequent occurrences.
F	> 80	Excessive Delays: This level, considered unacceptable to most drivers, often occurs with oversaturation (that is, when arrival traffic volumes exceed the capacity of the intersection). It may also occur at nearly saturated conditions with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

SOURCE: Transportation Research Board, *Highway Capacity Manual*, Washington D.C., 2000, pages 10-16 and 16-2).

Table 2: Level of Service Criteria - Unsignalized Intersections

Level of Service	Average Delay (seconds/vehicle)
A	0 - 10
В	>10 - 15
С	>15 - 25
D	>25 - 35
E	>35 - 50
F	>50

SOURCE: Transportation Research Board, *Highway Capacity Manual*, Washington D.C., 2000, pages 10-16 and 16-2).

# **Signal Warrant Analysis**

As per City of Sacramento's Traffic Study Guidelines, the Peak Hour Signal Warrant analyses were performed for stop sign controlled intersections where reported LOS is "D" or worse. This analysis utilizes the methodology outlined in the *MUTCD 2003 Network* (FHWA, Washington DC, 2003, Chapter 4).

# **Roadway Segment Analysis**

The study area roadway segments were evaluated based on the criteria per City of Sacramento's Traffic Study Guidelines. For analysis purpose, West El Camino Avenue is assumed as an arterial with moderate access control and Orchard Lane, Riverdale Drive (Proposed), and River Oaks Way (Proposed) are considered to be low access control arterial. Table 3 presents the LOS criteria for roadways.

# Freeway Off Ramp Analysis

The freeway ramps were also analyzed in terms of the expected queues versus the storage capacity. The length of a vehicle is assumed to be 25 feet long.

Table 3: Level of Service Criteria - Road Segments

## Low Access Control

	Maximum Volume for Given Service Level								
# of Lanes	A	A B C D E							
2	9,000	10,500	12,000	13,500	15,000				
4	18,000	21,000	24,000	27,000	30,000				
6	27,000	31,500	36,000	40,500	45,000				

# Moderate Access Control

	Maximum Volume for Given Service Level									
# of Lanes	A	A B C D E								
2	10,800	12,600	14,400	16,200	18,000					
4	21,600	25,200	28,800	32,400	36,000					
6	32,400	37,800	43,200	48,600	54,000					

SOURCE: City of Sacramento Traffic Impact Guidelines, 1996

# Introduction to Analysis

# **Project Land Use and Circulation**

#### **Land Use**

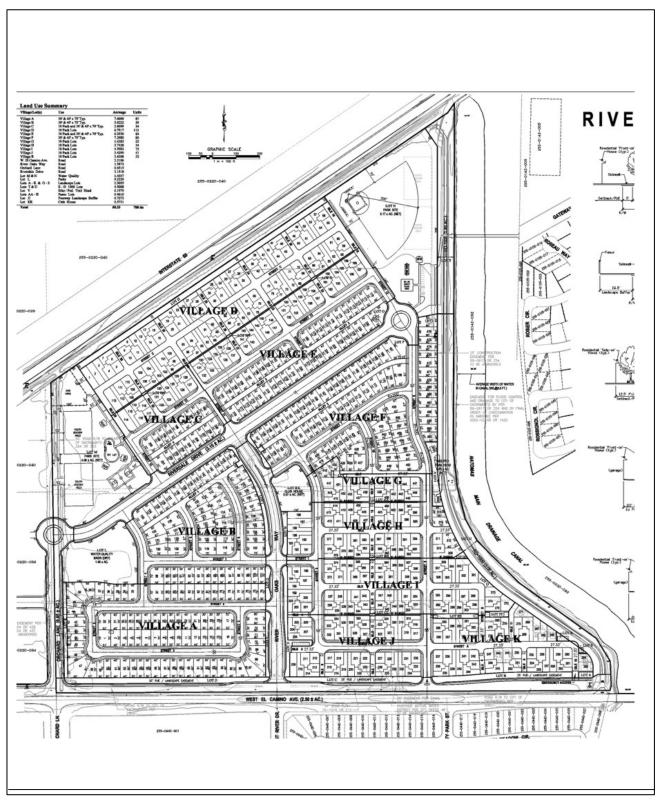
The Proposed River Oaks Project consists of a proposed residential development with 708 single-family residential dwelling units. During the final stage of this traffic impact analysis, the Proposed Project has been revised. The Proposed Project revisions include the construction of 654 residential units. Since this traffic impact analysis is based on higher number of residential units (708 units) in comparison to the later revisions, the traffic analysis for this study is not revised to incorporate the project revisions as this study is based on a more conservative approach.

#### **Access**

The major access and circulation system for the proposed project consists of the following. Figure 5 presents the site plan of the Proposed Project:

- Riverdale Drive via extension of Orchard Lane from its current terminus located north of West El Camino Avenue.
- River Oaks Way (Proposed) the proposed River Oaks Way will form the northern approach of the existing West El Camino Avenue/West River Drive intersection and it will provide full access movements for the project site. The proposed access is analyzed with stop control at West El Camino Avenue for the proposed River Oaks Way as well as West River Drive approaches.
- East Project Driveway right-in-right out access only with stop controlled intersection at West El Camino Avenue for the East Project Driveway approach.

Figure 5. Site Plan



#### **Circulation Elements**

Gateway Oaks Drive Extension: The City's South Natomas Community Plan (SNCP) calls for various street improvements within the study area in order to bring the South Natomas street system to its maximum feasible capacity. One of the street improvements in the SNCP is to build a new loop road connecting Orchard Lane and Gateway Oaks Drive north of West El Camino Avenue (extension of Gateway Oaks Drive). The proposed loop road would be created by extending Gateway Oaks Drive across Natomas Main Drainage Canal and the River Oaks project site, up to the current terminus of Orchard Lane just north of West El Camino Avenue. The proposed extension of Gateway Oaks Drive would require construction of a bridge across Natomas Main Drainage Canal to complete the loop road.

The River Oaks project proposes to create the loop road as described above. However, the River Oaks project proposes to construct a bike and pedestrian only bridge in place of the bridge for automobile traffic across Natomas Main Drainage Canal, and thus eliminate the extension of Gateway Oaks Drive for vehicular circulation across the canal. This would in turn eliminate the vehicular circulation along the proposed new loop road between Gateway Oaks Drive and Orchard Lane as proposed in the SNCP.

The traffic and circulation impacts of the proposed amendment to SNCP due to the elimination of Gateway Oaks Drive extension are evaluated into this traffic impact analysis study.

West El Camino Avenue: The SNCP calls for widening West El Camino Avenue west of Truxel Road to 6-lanes except for I-5 overcrossing where a four-lane bridge would remain. Currently, the 'West El Camino Avenue Widening and Bridge Replacement Project' is in progress (at the time of this analysis). This project will widen West El Camino Avenue from 2-lanes to 4-lanes between Orchard Lane and Natomas Main Drainage Canal; refer the section on Existing Environmental Settings for additional information.

This traffic impact study evaluates and compares the traffic operations with and without River Oaks project under cumulative conditions (Year 2025) for two different scenarios: (a) West El Camino Avenue as a 6-lane roadway as mentioned in the SNCP, and (b) West El Camino Avenue as a 4-lane roadway within the study area. Please refer to the section on Analysis Scenarios for additional information.

#### **Project Trip Generation**

Trip generation of the Project is based upon information compiled by the Institute of Transportation Engineers (*Trip Generation*, Seventh Edition, 2003). In summary, the Project has the potential to generate about 6,295 vehicle trips on an average day, with 505 trips during the weekday morning peak hour and 624 trips during the weekday evening peak hour. Table 4 summarizes the number of trips that would be generated by the Project.

During the final stage of this traffic impact analysis, the Proposed Project has been revised. The Proposed Project revisions include the construction of 654 residential units. As mentioned previously, this traffic impact analysis is based on 708 residential units. The traffic analysis for this study is not revised to incorporate the project revisions and this study is based on a more conservative approach, assuming a larger number of residential units.

**Table 4: Proposed Project Trip Generation** 

			Number of Trips					
Land Use	Amount	AM	AM Peak Hour		PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	
Proposed Project								
Residential - SF	708.0 DU	J 126	379	505	393	231	624	6,295
SOURCE: Trip Generation, 7th Edition, Institute of Transportation Engineers, 2003								

#### **Project Trip Distribution**

The distribution of trips associated with the project site was derived from the SACMET 2025 travel demand model, observations of travel patterns near the site, and knowledge of the proposed access locations associated with the Project. The model zone within which the project is located was isolated and its peak hour trips were assigned to the network. From this selected zone assignment, the directional distributions of inbound and outbound trips were estimated. Figures 6 and 7 show the AM and PM peak period estimated trip distribution percentages and the actual assigned traffic volumes.

El Centro Rd San Juan Rd Orchard Ln 13% Project Site 1% (5) 4 5 42% (212) 54% (273) W. El Camino Av Garden Hwy Richards Blvd KEY:

Figure 6. Project Trip distribution (Percentages & Volumes) - AM Peak Period

45% (227) = Trips Percentage (Number of Trips)

El Centro Rd San Juan Rd Orchard Ln 13% Project Site 1% (6) 4 5 42% (262) W. El Camino Av Garden Hwy Richards Blvd KEY: **45% (227)** = Trips Percentage (Number of Trips)

Figure 7. Project Trip distribution (Percentages & Volumes) - PM Peak Period

# Standards of Significance

The standards of significance in this analysis are based on the *City of Sacramento Traffic Impact Guidelines* (1996). For freeway off-ramps, the Caltrans' standard of significance are used for impact identification.

#### **Intersections and Roadways**

In the City of Sacramento, an impact is considered significant when:

- The project causes the facility to change from LOS C or better to LOS D or worse, or;
- For facilities that are, or will be, worse than LOS C without the project, an impact is considered significant if the project: 1) increases the average delay by 5 seconds or more at an intersection, or 2) increases the v/c ratio by 0.02 or more on a roadway.

For intersections at freeway ramps, an impact is considered significant when:

The project causes the facility to fall below the LOS identified as per Caltrans District 3 Route Concept Report.; Caltrans considers an impact to an intersection as significant when the project causes the intersection LOS to deteriorate beyond LOS D.

#### Freeway Ramps

Caltrans considers that a significant impact would occur at the freeway offramp if the project were to result in vehicle queues that extend into the ramps' deceleration area or onto the freeway.

#### **Bikeways**

An impact is considered significant if implementation of the project will disrupt or interfere with existing or planned (BMP) bicycle or pedestrian facilities.

A significant bikeway impact could also occur if the project were to result in unsafe conditions for bicyclists, including unsafe bicycle/pedestrian or bicycle/motor vehicle conflicts.

#### **Pedestrian Circulation**

A significant pedestrian circulation impact would occur if the project were to result in unsafe conditions for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflicts. An impact is also considered significant if the implementation of the project will disrupt or interfere with existing or planned pedestrian facilities.

#### **Transit System**

A significant impact to the transit system would occur where project generated ridership when added to the existing or future ridership, would exceed available or planned system. Capacity is defined as the total number of passengers the system of busses and light rail vehicles can carry during the peak hours of operations.

# **Analysis Scenarios**

As mentioned previously, the River Oaks project proposes to eliminate the extension of Gateway Oaks Drive that is proposed in the SNCP in order to create a new loop road between Orchard Lane and Gateway Oaks Drive north of West El Camino Avenue. The impacts of this change in circulation system are evaluated in this traffic impact analysis study by comparing traffic operations within the study area with and without Gateway Oaks Drive Extension.

Furthermore, the SNCP calls for widening West El Camino Avenue west of Truxel Road to 6-lanes except for I-5 overcrossing where a 4-lane bridge would remain. This traffic impact analysis evaluates the impacts of the proposed project considering two alternate scenarios under the cumulative conditions (Year 2025) namely, widening West El Camino Avenue to 4-lanes versus 6-lanes and thus provides a comparative evaluation of both scenarios.

In view of the above, a range of traffic operations and impact analysis has been provided in this study for the following different scenarios:

- Baseline No Project
- Baseline Plus Project
- Cumulative No Project with 4-lanes on West El Camino Avenue
- Cumulative Plus Project without Gateway Oaks Drive Extension and with 4-lanes on West El Camino Avenue
- Cumulative Plus Project with Gateway Oaks Drive Extension and with 4lanes on West El Camino Avenue
- Cumulative No Project with 6-lanes on West El Camino Avenue
- Cumulative Plus Project without Gateway Oaks Drive Extension and with 6-lanes on West El Camino Avenue
- Cumulative Plus Project with Gateway Oaks Drive Extension and with 6lanes on West El Camino Avenue

# **Impact Classification**

This analysis classifies impacts in the following manners:

- No Impact;
- Less Than Significant (mitigation unnecessary);
- Significant Avoidable (impact can be mitigated to less-than significant levels); and
- Significant Unavoidable (impact cannot be mitigated to less-than-significant levels).

#### **Feasible Mitigation Measures**

The feasibility of the mitigation is also discussed. Some measures require additional right-of-way that might not be available through implementation of the Proposed Project. To implement these measures, right-of way would have to be acquired. The potential cost of right-of-way acquisition makes the mitigations measures infeasible per Section 15364 of CEQA; therefore, the impact remains significant and unavoidable.

# **Impact Analysis**

# **Baseline No Project Conditions**

To develop the baseline traffic conditions, the peak hour traffic to be generated by the Baseline Projects, i.e. the approved projects within the study area, was estimated. The baseline traffic volumes were based on the existing traffic volumes plus traffic expected from the various approved projects. The following approved projects are included under the baseline conditions:

- The Villas at Riverbend A 146 multi-family unit housing development to be located in the southeast corner of West El Camino Avenue and Orchard Lane.
- Gateway Center Phase III (Natomas West Business Park Phase III) A 167,996 square feet of office development located south of West El Camino Avenue. It is bounded by Venture Oaks Way and Gateway Oaks Drive.
- Natomas Corporate Center A 235,562 square feet of office development located in the southwest corner of West El Camino Avenue and Natomas Park Drive.

- Riverbend (Villages A & B) A 103 single-family unit housing development to be located south of West River Drive and I-80, and west of Marina Glen Way.
- River Plaza Phase 3 A 163,660 square feet of office development that is located west of Gateway Oaks Drive. It is bounded by Garden Highway and River Plaza Drive.
- Park El Camino A mixed-use development including 176,000 square feet of office space, a fast food restaurant with drive-through window totaling 6,000 square foot, a sit-down restaurant totaling 10,000 square feet, a gas station with 12 fueling station, a convenience mart, and a car wash, and a hotel with 120 rooms. It is to be located in the southeast corner of West El Camino Avenue and I-80.
- Crown Corporate Center A 119,326 square foot of office development (Phase 3B, Building B), to be located in the southwest corner of I-5/I-80 Interchange on Gateway Oaks Drive.

Table 5 summarizes the AM and PM peak hour trip generation estimates for each of these approved projects. These approved projects would generate approximately 1852 trips during the AM peak hour, and 1830 trips during the PM peak hour.

**Table 5: Baseline Projects Trip Generation Estimate** 

		Amount	Number of Trips						
Approved Projects	Land Use		AM Peak Hour			PM Peak Hour			Week day
			In	Out	Total	In	Out	Total	
Villas at Riverbend	Multi-Family Residential	146 DU	15	60	75	64	34	98	590
Gateway Center Phase III	Office	168 KSF	250	34	284	45	222	267	1,989
Natomas Corporate Center	Office	236 KSF	327	45	372	58	284	343	2,580
Riverbend – Villages A & B	Single Family Residential	103 DU	21	61	82	69	41	110	1,068
River Plaza - Phase 3	Office	164 KSF	245	33	278	45	217	262	1,949
Park El Camino	Mixed Use		382	163	545	196	342	538	
Crown Cooperate Center	Office	119 KSF	190	26	216	36	176	212	1,528
Total:			1,430	422	1,852	513	1,317	1,830	9,704
SOURCES: Trip Generation, 7th Edition, Institute of Transportation Engineers, 2003									

SOURCES: Trip Generation, 7th Edition, Institute of Transportation Engineers, 2003

The roadway system for the analysis of Baseline conditions is the existing roadway network plus additional roadway improvement currently under construction within the study area. Modifications to the Baseline roadway system also include the applicable mitigation measures from the baseline projects. According to the West El Camino Avenue Widening and Bridge Replacement Project, West El Camino Avenue would be widened from existing 2-lanes to 4-lanes between Orchard Lane and Grasslands Drive (just east of the East Main Drainage Canal). A summary of the lane configurations and traffic controls for Baseline No Project conditions is shown in Figure 8.

The analysis of baseline conditions was performed using the TRAFFIX traffic impact analysis software package.

2 5 W. El Camino Ave I-80 WB Off-Ramp  $\checkmark$ W. El Camino Ave W. El Camino Ave W. El Camino Ave STOP W. El Camino Ave East Project Driveway I-80 EB Off-Ramp W. River Dr (Proposed) Orchard Lane 6 8 Azev edo Dr W. EI Camino Ave W. El Camino Ave SIGNAL I-5 NB Off-Ramp Gateway Oaks Dr San Juan Rd Orchard Azevedo Project Site 8 W. El Camino Av Garden Hwy Richards Blvd

Figure 8. Baseline No Project Lanes & Traffic Control

#### **Intersection Level of Service (Baseline Conditions)**

Table 6 summarizes the level of service results for the study intersections under the Baseline No Project scenario. The technical calculations are presented in Appendix B. The AM and PM peak hour turning movement traffic volumes are shown in Figures 9 and 10, respectively.

**Table 6: Baseline No Project Conditions – Intersection Operations** 

	Control	Peak Hour					
Intersection		A	M	PM			
		$LOS^1$	Delay <sup>2</sup>	$LOS^1$	Delay <sup>2</sup>		
West El Camino Ave. / I-80 WB Off- Ramp	Stop Sign	F (F)	>50 (>50)	F (F)	>50 (>50)		
West El Camino Ave. / I-80 EB Off- Ramp	Stop Sign	E (F)	41.1 (>50)	F (F)	>50 (>50)		
West El Camino Ave. / Orchard Ln	Signal	C	30.6	C	26.9		
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (E)	2.3 (37.7)	A (E)	1.4 (42.0)		
West El Camino Ave. / East Project Driveway (Proposed)	Stop Sign	N/A	N/A	N/A	N/A		
West El Camino Ave. / Gateway Oaks Dr.	Signal	С	27.9	D	35.0		
West El Camino Ave. / I-5 NB Off-Ramp	Signal	В	19.3	С	21.4		
West El Camino Ave. / Azevedo Dr.	Signal	С	32.9	С	26.0		
West El Camino Ave. / Truxel Rd	Signal	C	30.8	C	33.0		

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service; A (E) = Average LOS (Worst Movement)

#### NOTE:

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose.

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

32 3 126 595 1 2 4 5 <u>↑</u> 446 136 360 506 314 939 660 946 683 1,288 738 1,389-772 130 34 162 225 357 √ W. EI Camino W. EI W. EI W. EI W. EI I-80 WB Off Ramp Camino Camino Camino Camino Ave Ave Ave Ave Ave 52 52 178 6 7 8 9 223-371 180-192 216 59 670 891 474 687 586 **-1,436** 491 367 438 477 124 16 J Azevedo Dr< 103 135 W. EI W. EI W. EI Gateway Oaks Dr Camino Camino Camino San Juan Rd Truxel Rd Orchard Ln Azevedo Gateway Oaks G Project Site 7 4 5 8 W. El Camino Av Garden Hwy Richards Blvd

Figure 9. Baseline No Project AM Peak Hour Traffic Volumes

214 451 1 5 **1** 411 - 78 - 1,123 1,007 1 496 101 908 ← 849 627 795 - 1,323 1,051 <del>-</del> 356 - 1,396 105 180 313 190 34 W. EI W. EI W. EI I-80 WB Off Ramp Camino Camino Camino Ave 6 7 8 40 129 574 116 501 -232 913 747 1,009 - 1,086 **1,287** 600 700 -417 168 286 88 34 102 113 W. EI 79 ↓ 79 ↓ 191 <sup>♪</sup> 675 → W. EI W. EI W. EI 516 <del>^</del> 55 → 354 ੍ Camino Camino Camino Camino San Juan Rd Truxel Rd Orchard Ln Azevedo Gateway Oak 6 Project Site 7 4 5 8 W. El Camino Av

Figure 10. Baseline No Project PM Peak Hour Traffic Volumes

Garden Hwy

Richards Blvd

As seen in Table 6, all the intersections within the study area would operate at acceptable conditions per City's standards under Baseline No Project conditions, except for the intersection of West El Camino Avenue and I-80 Ramps and the intersection of West El Camino Avenue and Gateway Oaks Drive. The West El Camino Avenue intersection at I-80 WB Off-Ramp would operate at LOS F for both AM and PM peak hours under the Baseline No Project conditions. The intersection of West El Camino Avenue and I-80 EB Off-Ramp would operate at LOS E during the AM peak hour and LOS F during the PM peak hour. The intersection of West El Camino Avenue and Gateway Oaks Drive would operate at LOS D during the PM peak hour.

#### **Signal Warrant Analysis**

A peak hour signal warrant analysis was performed for stop sign controlled intersections as described in the section of "Analysis Methodology". The results of the analysis are presented in Appendix A. Under the Baseline No Project scenario, the West El Camino Avenue intersections at I-80 WB Off-Ramp and I-80 EB Off-Ramp both meet the signal warrant during the AM and PM peak hours.

#### **Street Segments**

Table 7 summarizes the Baseline No Project conditions average daily traffic (ADT) volumes on study area street segments. The Average Daily Traffic Volumes for the Baseline No Project conditions is shown in Figure 11.

As shown in Table 7, all street segments would operate at acceptable LOS, except for the segments of West El Camino Avenue between El Centro Road and I-80 EB Ramps and Orchard Lane, including the freeway overcrossing, would all operate at LOS F.

#### Freeway Off-Ramps

Freeway Off-Ramps were analyzed to determine whether the available storage lengths are adequate for the anticipated queues. Table 8 presents the comparison of the queue length and the storage length for the Baseline No Project conditions. The I-80 EB Off-ramp would not have adequate capacity to store the anticipated queue during the PM peak hour.

**Table 7: Baseline No Project Conditions – Street Segments** 

Street	Location	Number of Lanes	Avg. Weekday Traffic Volumes	LOS	V/C
W. El Camino Ave	Between El Centro Rd and I- 80 WB ramps	2	21,330	F	1.19
W. El Camino Ave	Between I-80 EB ramps and Orchard Ln	2	25,404	F	1.41
W. El Camino Ave	Between Orchard Ln and River Oaks Way (Proposed)/West River Drive	4	25,236	С	0.70
W. El Camino Ave	Between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)	4	24,670	В	0.69
W. El Camino Ave	Between East Project Driveway (Proposed) and Grasslands Way	4	24,670	В	0.69
W. El Camino Ave	Between Grassland Way and Gateway Oaks Dr	4	26,524	С	0.74
W. El Camino Ave	Between Gateway Oaks Dr and I-5 SB ramps	5	32,139	С	0.71
W. El Camino Ave	Between I-5 NB ramps and Azevedo Dr	5	30,484	В	0.68
Orchard Ln	North of W. El Camino Ave	2	4,833	A	0.32
NOTE: Bolded v	alues indicate unacceptable LOS as per (	City standards.			

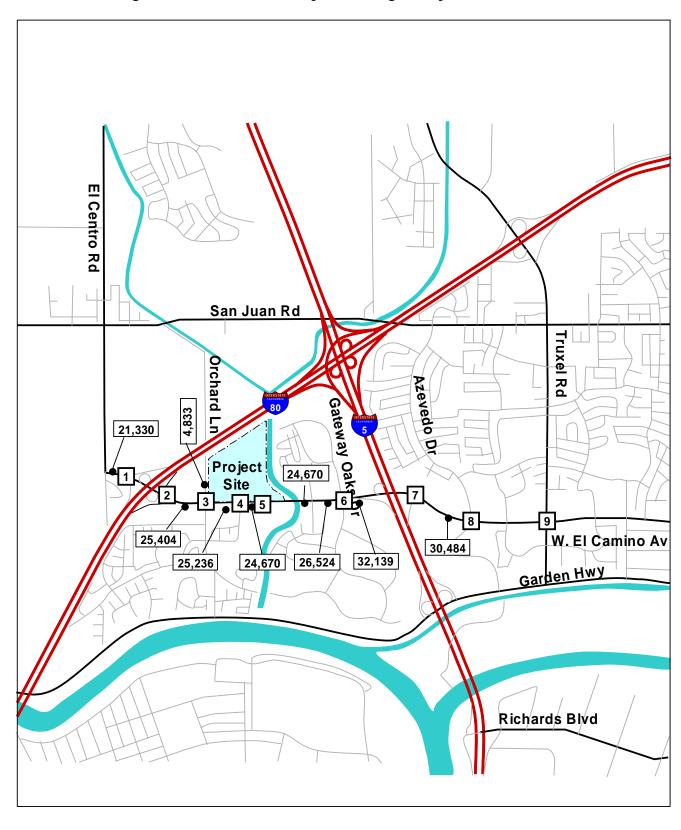


Figure 11. Baseline No Project Average Daily Traffic Volumes

Table 8: Baseline No Project Conditions - Ramp Queuing

Location	Storage	AM P	eak Hour	PM Peak Hour			
	Capacity (ft)	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity		
I-80 WB Off-ramp to W. El Camino	Ave.						
SBL	1,200	1,133	YES	928	YES		
SBR	1,200	15	YES	90	YES		
I-80 EB Off-ramp to W. El Camino Ave.	1,000	673	YES	1,440	NO		
I-5 NB Off-ramp to W. El Camino Ave.	600	367	YES	358	YES		
NOTE: Bolded values indicate a queue greater than the storage capacity.							

# **Impacts and Mitigation Measures**

# **Baseline Plus Project Conditions**

Traffic forecasts for the Baseline Plus Project scenario were developed by manually adding project trips to the baseline traffic volumes using the trip generation and distribution described previously. A summary of the lane configurations and traffic controls for Baseline Plus Project conditions is shown in Figure 12.

## Impacts (Baseline Plus Project Conditions)

#### Intersection

Figures 13 and 14 present the Baseline Plus Project traffic volumes for AM and PM peak hours. These volumes were used to calculate the Baseline Plus Project level of service at the study intersections. The results of the LOS calculation are shown in Tables 9 and 10 for AM and PM peak hours, respectively.

2 5 W. EI Camino Ave W. El Camino Ave W. El Camino Ave I-80 WB Off-Ramp ~ W. El Camino Ave STOP STOP STOP W. El Camino Ave East Project Driveway W. River Dr I-80 EB Off-Ramp (Proposed) Orchard Lane 6 Azev edo Dr Truxel Rd W. El W. EI W. El Camino Ave I-5 NB Off-Ramp Gateway Oaks Dr San Juan Rd Orchard Azevedo Project Site 4 5 8 W. El Camino Av Garden Hwy Richards Blvd

Figure 12. Baseline Plus Project Lanes & Traffic Control

Figure 13. Baseline Plus Project AM Peak Hour Traffic Volumes

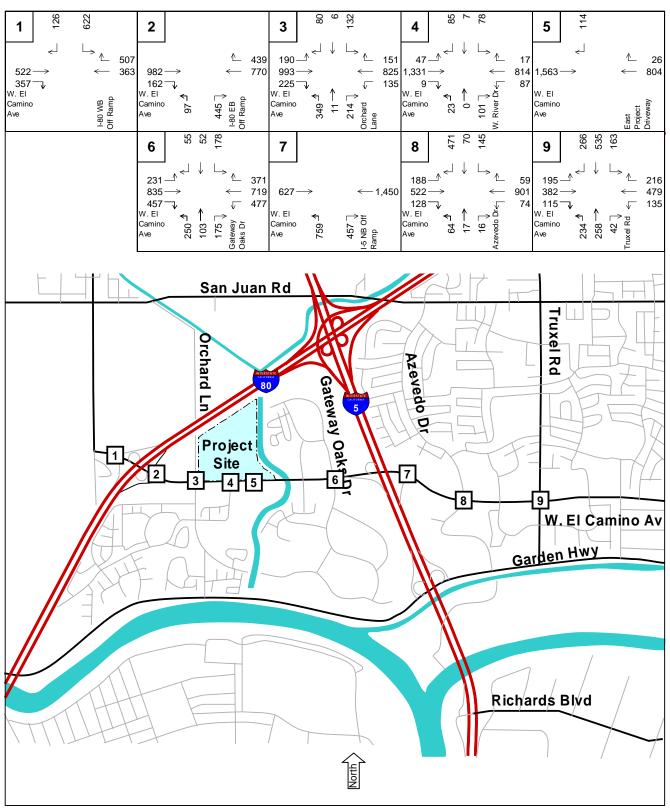


Figure 14. Baseline Plus Project PM Peak Hour Traffic Volumes

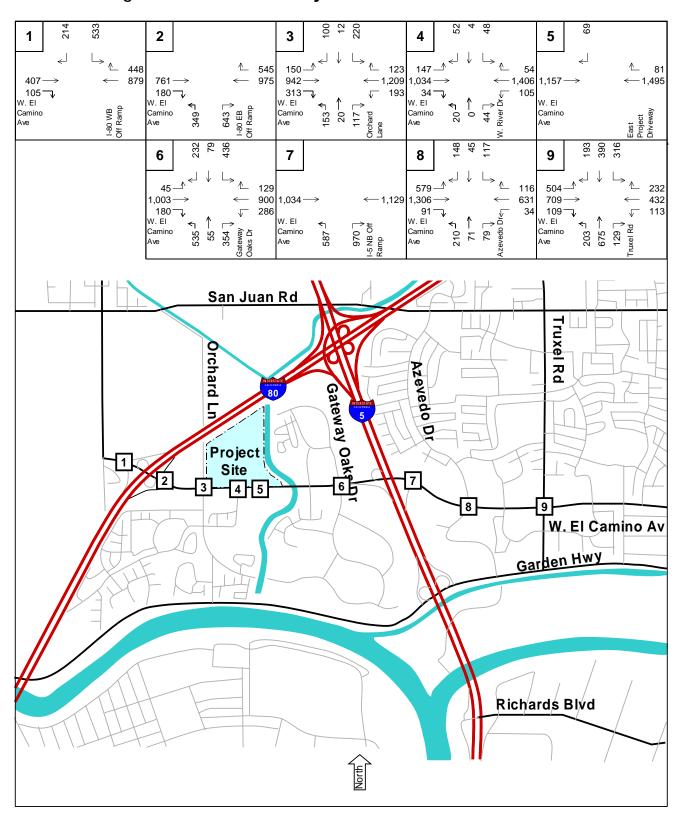


Table 9: Baseline Conditions - Intersection Operations for AM Peak Hour

Intersection	Control			Baseline Plus Project		
		Project   Project   Project   Project   Project   Project   LOS¹   LOS	Delay <sup>2</sup>			
West El Camino Ave. / I-80 WB Off- Ramp	Stop Sign			_	>50 (>50)	
West El Camino Ave. / I-80 EB Off- Ramp	Stop Sign	<del></del>		_	>50 (>50)	
West El Camino Ave. / Orchard Ln	Signal	C	30.6	С	31.7	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign			_	40.6 (>50)	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A		0.6 (12.5)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	С	27.9	С	27.7	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	В	19.3	В	19.6	
West El Camino Ave. / Azevedo Dr.	Signal	C	32.9	С	33.2	
West El Camino Ave. / Truxel Rd	Signal	С	30.8	С	30.9	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

Bolded values indicate non-compliance with City standards.

Locations with significant impacts are shaded.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose.

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Table 10: Baseline Conditions - Intersection Operations for PM Peak Hour

Intersection	Control		ine No ject	Baseline Plus Project		
		LOS <sup>1</sup>	Delay <sup>2</sup>	LOS <sup>1</sup>	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off- Ramp	Stop Sign	F (F)	>50 (>50)	F (F)	>50 (>50)	
West El Camino Ave. / I-80 EB Off- Ramp	Stop Sign	F (F)	>50 (>50)	F (F)	>50 (>50)	
West El Camino Ave. / Orchard Ln	Signal	С	26.9	С	28.4	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (E)	1.4 (42.0)	F (F)	>50 (>50)	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	A (C)	0.5 (18.3)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	D	35.0	С	34.7	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	21.4	С	21.7	
West El Camino Ave. / Azevedo Dr.	Signal	С	26.0	C	26.4	
West El Camino Ave. / Truxel Rd	Signal	С	33.0	С	33.1	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

Bolded values indicate non-compliance with City standards.

Locations with significant impacts are shaded.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose.

As seen in Tables 9 and 10, all the study area intersections, except three as described in the following discussion, are expected to operate at an acceptable LOS condition under the Baseline Plus Project scenario in accordance with the City's standards of significance. The Proposed Project traffic would create **significant impacts** at the intersections of West El Camino Avenue/I-80 Westbound Off-Ramps, West El Camino Avenue/I-80 Eastbound Off-

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Ramps, and West El Camino Avenue/River Oaks Way (Proposed)/West River Drive.

A) West El Camino Avenue/I-80 Westbound Off-Ramps (#1)

The addition of the Proposed Project peak hour traffic would increase the delay at the West El Camino Avenue/I-80 Westbound Off-Ramps intersection by more than 5 seconds and exacerbate the LOS F conditions in AM and PM peak hours, respectively. This is therefore considered a significant impact.

B) West El Camino Avenue/I-80 Eastbound Off-Ramps (#2)

The addition of the Proposed Project peak hour traffic would increase the delay at the West El Camino Avenue/I-80 Eastbound Off-Ramps intersection by more than 5 seconds and exacerbate the LOS E and LOS F conditions in AM and PM peak hours, respectively. This is therefore considered a *significant impact*.

C) West El Camino Avenue/River Oaks Way (Proposed)/West River Drive (#4)

With the addition of the Proposed Project peak hour traffic, the LOS at the intersection of West El Camino Avenue/River Oaks Way (Proposed)/West River Drive would degrade from the Baseline No Project LOS A to LOS E and LOS A to LOS F during the AM and PM peak hours respectively, resulting into a *significant impact* at this intersection.

#### **Signal Warrant Analysis**

In addition to the intersection operations analysis, a signal warrant analysis was performed for all stop sign controlled intersections, which are expected to operate with unacceptable conditions according to the City's criteria. The results of the analysis are presented in Appendix A. Under the Baseline Plus Project scenario, the West El Camino intersections at I-80 Westbound Off-Ramps, I-80 Eastbound Off-Ramps, and River Oaks Way (Proposed)/West River Drive all meet the signal warrant during both peak hours.

#### Street Segments

Table 11 summarizes the Baseline Plus Project conditions average daily traffic (ADT) volumes on study street segments, and Figure 15 shows the ADT graphically.

As seen in Table 11, the Proposed Project traffic would create **significant impacts** on the following three street segments:

A) West El Camino Avenue between El Centro Road and I-80 Westbound Ramps

The addition of the Proposed Project traffic would increase the v/c ratio on West El Camino Avenue between El Centro Road and I-80 Westbound

Ramps by more than 0.02 and exacerbate the LOS F conditions. This is therefore considered a *significant impact*.

B) West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane

The addition of the Proposed Project traffic would increase the v/c ratio on West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane by more than 0.02 and exacerbate the LOS F conditions. This is therefore considered a *significant impact*.

C) West El Camino Avenue between Grassland Way and Gateway Oaks

With the addition of the Proposed Project traffic, the LOS on West El Camino Avenue between Grassland Way and Gateway Oaks Drive would degrade from the Baseline No Project LOS C to LOS D, resulting in a *significant impact* on this street segment.

#### **Freeway Off-Ramps**

Freeway Off-Ramps were analyzed to determine whether the available storage lengths are adequate for the anticipated vehicle queues under Baseline Plus Project conditions. Tables 12 and 13 present the comparison of the queue length and the available storage length for the Baseline Plus Project conditions for the AM and PM peak hours, respectively.

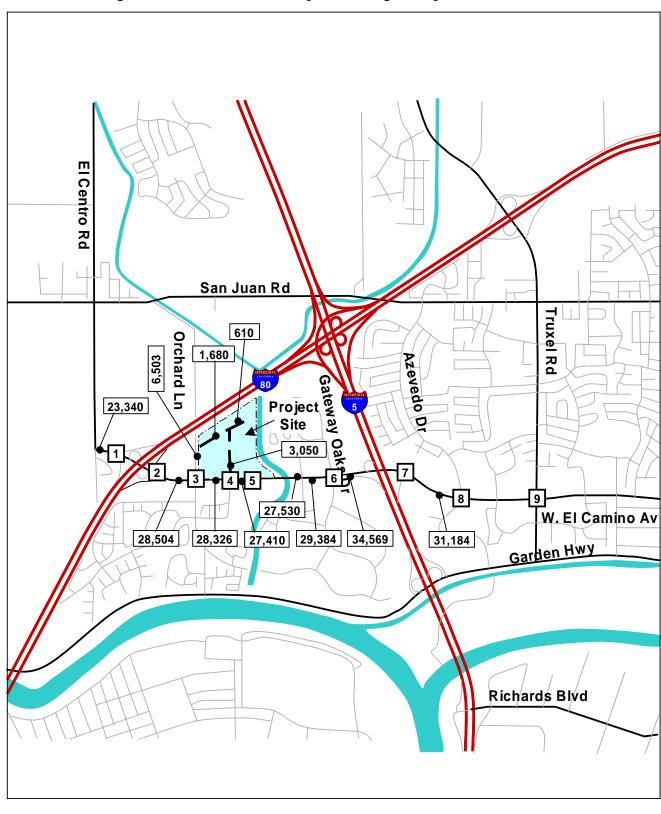


Figure 15. Baseline Plus Project Average Daily Traffic Volumes

**Table 11: Baseline Conditions – Street Segments** 

Street	Location	# of Lanes	Baselin	ie No F	Project		line Pl roject	us
		Lanes	ADT	LOS	V/C	ADT	LOS	V/C
W. El Camino Ave	Between El Centro Rd and I-80 WB ramps	2	21,330	F	1.19	23,340	F	1.30
W. El Camino Ave	Between I-80 EB ramps and Orchard Ln	2	25,404	F	1.41	28,504	F	1.58
W. El Camino Ave	Between Orchard Ln and River Oaks Way (Proposed)/West River Drive	4	25,236	С	0.70	28,326	С	0.79
W. El Camino Ave	Between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)	4	24,670	В	0.69	27,410	С	0.76
W. El Camino Ave	Between East Project Driveway (Proposed) and Grasslands Way	4	26,670	В	0.69	27,530	С	0.76
W. El Camino Ave	Between Grassland Way and Gateway Oaks Dr	4	26,524	C	0.74	29,384	D	0.82
W. El Camino Ave	Between Gateway Oaks Dr and I-5 SB ramps	5	32,139	C	0.71	34,569	С	0.77
W. El Camino Ave	Between I-5 NB ramps and Azevedo Dr	5	30,484	В	0.68	31,184	В	0.69
Orchard Ln	North of W. El Camino Ave	2	4,833	A	0.32	6,503	A	0.43

**Table 12: Baseline Conditions – Street Segments (continued)** 

Street	Location	# of Lanes	Baseline No Project  Baseline Plu Project			us		
	Patrus en Diven Oaks		ADT	LOS	V/C	ADT	V/C	
Riverdale Dr (Proposed)	Between River Oaks Way (Proposed) / West River Drive and East Terminal	2	-	-	ı	610	A	0.04
River Oaks Way (Proposed)	North of W. El Camino Ave	2	-	-	-	3,050	A	0.20

NOTE: Bolded values indicate unacceptable LOS as per City standards.

Locations with significant impacts are shaded.

Table 13: Baseline Conditions – Ramp Queuing for AM Peak Hour

Location	Storage		eline No roject		Baseline Plus Project		
	~ .	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity		
I-80 WB Off-ramp to W. El Camino							
SBL	1,200	1,133	YES	1,280	NO		
SBR	1,200	15	YES	18	YES		
I-80 EB Off-ramp to W. El Camino	1,000	673	YES	810	YES		
I-5 NB Off-ramp to W. El Camino	600	367	YES	375	YES		

NOTE: Bolded values indicate a queue greater than the storage capacity.

Locations with significant impacts are shaded.

Table 14: Baseline Conditions – Ramp Queuing for PM Peak Hour

Location	Storage		eline No roject	Baseline Plus Project		
	Capacity (ft)	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity	
I-80 WB Off-ramp to W. El Camino						
SBL	1,200	928	YES	1,235	NO	
SBR	1,200	90	YES	98	YES	
I-80 EB Off-ramp to W. El Camino	1,000	1,440	NO	1,870	NO	
I-5 NB Off-ramp to W. El Camino	600	358	YES	383	YES	
NOTE: Bolded values indicate a queue greater than the storage capacity.						

The Proposed Project traffic would create **significant impacts** on the following two freeway off-ramps:

#### A) I-80 Westbound Off-Ramp at West El Camino Avenue

As seen in Tables 12 and 13, the vehicle queues on the I-80 Westbound off-Ramp at West El Camino Avenue would exceed the available storage length and would extend into the deceleration area of the ramp during the AM and PM peak hours under the Baseline Plus Project conditions. This is therefore considered a *significant impact*.

#### B) I-80 Eastbound Off-Ramp at West El Camino Avenue

As seen in Tables 12 and 13, the vehicle queues on the I-80 Eastbound off-Ramp at West El Camino Avenue would exceed the available storage length and would extend into the deceleration area of the ramp and onto the eastbound mainline during the PM peak hour under the Baseline Plus Project conditions. This is therefore considered a *significant impact*.

#### **Bicycle System Impacts**

Development of the Proposed Project would result in an increase in bicycle trips in the study area by residents and visitors. However, the Proposed Project is not anticipated to hinder or eliminate the existing bikeways or interfere with the implementation of the planned bikeways in the study area. Moreover, the development of the Proposed Project would result in additional bikeway improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal.

As a result, the implementation of the Proposed Project would result in **no** *impact* to the bicycle system.

#### **Pedestrian System Impacts**

Development of the Proposed Project would result in an increase in pedestrian trips in the study area by residents and visitors. However, the Proposed Project is not anticipated to result in an unsafe condition for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflict. Moreover, the development of the Proposed Project would result in additional pedestrian improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal.

As a result, the implementation of the Proposed Project would result in **no** *impact* to the pedestrian system.

#### **Transit Impacts**

Development of the Proposed Project would result in an increase in demand for transit. Currently, Regional Transit District's Bus Routes 88 and 89 provide transit services in the vicinity of the Project site. The nominal transit usage generated by the Proposed Project is not anticipated to exceed the capacity of the available/planned transit system in the study area. The implementation of the Proposed Project would result in *no impact* to the transit system.

### Mitigation Measures (Baseline Plus Project Conditions)

#### Intersection

The necessary mitigation measures required to offset the significant traffic impacts at study intersections are discussed below:

A) West El Camino Avenue/I-80 Westbound Off-Ramps (#1)

Install a traffic signal. This mitigation measure would improve the level of service from LOS F to LOS C during both the AM and PM peak hours. The impact after mitigation would be *less-than significant*.

B) West El Camino Avenue/I-80 Eastbound Off-Ramps (#2)

Install a traffic signal. Widen the northbound approach for a length of 250 feet to provide a separate left turn lane and a separate right turn lane. Restripe the westbound approach from a shared through-right lane to a separate through lane and a right turn lane. This mitigation measure would improve the level of service from LOS F to LOS C during both the AM and PM peak hours compared to the Baseline No Project conditions. The impact after mitigation would be *less-than significant*.

C) West El Camino Avenue/River Oaks Way (Proposed)/West River Drive (#4)

Install a traffic signal. This mitigation measure would improve the level of service from LOS E to LOS B during the AM peak hour, and from LOS F to LOS B during the PM peak hour. The impact after mitigation would be *less-than significant*.

Figure 16 illustrates the effects of the mitigation measures on traffic operations for the Baseline Plus Project conditions. Table 14 shows the LOS and delay with and without mitigations for the impacted intersections.

Figure 16. Intersection Lanes and Traffic Control - Baseline Plus Project Mitigation Measures

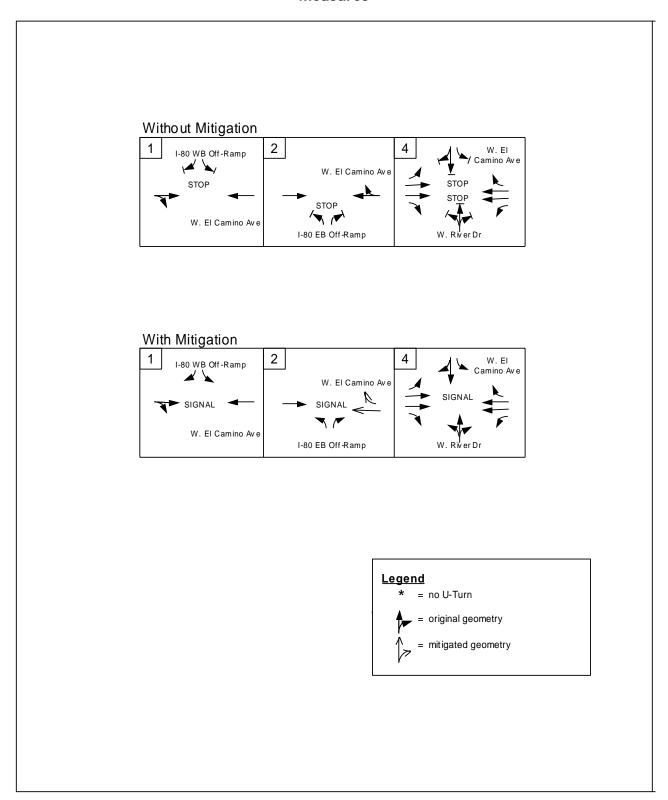


Table 15: Baseline Plus Project Conditions – Summary of Mitigation Measures for Impacted Intersections

Intersection	Withou	ıt Mitig	gation	With	tion	
	Control	LOS1	Delay <sup>2</sup>	Control	LOS1	Delay <sup>2</sup>
AM Peak Hour						
West El Camino Ave. / I-80 WB Off- Ramp	Stop Sign	F (F)	>50 (>50)	Signal	C	29.7
West El Camino Ave. / I-80 EB Off- Ramp	Stop Sign	F (F)	>50 (>50)	Signal	С	21.1
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	E	40.6	Signal	В	19.5
PM Peak Hour						
West El Camino Ave. / I-80 WB Off- Ramp	Stop Sign	F (F)	>50 (>50)	Signal	С	23.2
West El Camino Ave. / I-80 EB Off- Ramp	Stop Sign	F (F)	187.5 (>50)	Signal	С	34.6
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	F (F)	>50 (>50)	Signal	В	19.6

 $<sup>^{1}</sup>$  LOS = Level of Service

Bolded values indicate non-compliance with City standards.

Locations with significant impacts are shaded.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose.

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

#### **Street Segments**

The necessary mitigation measures required to offset the significant traffic impacts on street segments are discussed below.

- A) West El Camino Avenue between El Centro Road and I-80 Westbound Ramps, and
- B) West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane

Widen West El Camino Avenue in the above-mentioned segments from 2 lanes to 4 lanes. This mitigation would improve the level of service from LOS F to LOS B for the segment between El Centro Road and I-80 Westbound Ramps, and improve the level of service from LOS F to LOS C for the segment between I-80 Eastbound Ramps and Orchard Lane, reducing the impact of the proposed project to less than significant level.

As discussed above, the implementation of this mitigation measure would require widening segments of West El Camino Avenue between El Centro Road and Orchard Lane to 4-lanes, which would also require widening the I-80 overcrossing. The City is in the process of widening West El Camino Avenue to 4-lanes at the time of this analysis (outside the limits of above-mentioned impacted segments). At present, widening West El Camino Avenue for the segments beyond the limits of currently ongoing project is not funded; and as per Metropolitan Transportation Plan (MTP) for 2025 the expansion of freeway overcrossing is not anticipated until the year 2012. Furthermore, implementation of this mitigation measure would require Caltrans' approval for the work within the limits of I-80 interchange and overcrossing, and may require additional right-of-ways over which the applicant has no control.

In view of the above, this mitigation measure is infeasible as it cannot be accomplished at least in the near term / under the Baseline Plus Project conditions. The impact of the proposed project is therefore, considered *significant and unavoidable*.

C) West El Camino Avenue between Grassland Way and Gateway Oaks Drive

To mitigate this impact to a less-than significant level, West El Camino Avenue between Grassland Way and Gateway Oaks Drive would need to be widened from 4 lanes to 6 lanes. The City is in the process of widening West El Camino Avenue to 4-lanes at the time of this analysis (outside the limits of this segment). At present, widening West El Camino Avenue for the segments beyond the limits of currently ongoing project is not funded; also, widening West El Camino Avenue in this particular segment is not included in the MTP for 2025. Moreover, the applicant has no control over the implementation of the required improvements as they are outside the proposed project boundary, and may also involve acquisition of additional right-of-way.

In view of the above, this mitigation measure is infeasible as it cannot be accomplished at least in the near term / under the Baseline Plus Project conditions. The impact of the proposed project is therefore, considered *significant and unavoidable*.

#### Freeway Off-Ramps

The necessary mitigation measures required to offset the significant traffic impacts on freeway off-ramps are discussed below:

A) I-80 Westbound Off-Ramp at West El Camino Avenue

Install a traffic signal. This mitigation is also recommended to mitigate the intersection impact. This mitigation measure would reduce the anticipated queues on the off-ramp during both the AM and PM peak hours, and therefore the available storage lengths on the ramps are adequate for the anticipated queues. The impact after mitigation would be *less-than significant*.

B) I-80 Eastbound Off-Ramp at West El Camino Avenue

Install a traffic signal. Widen the northbound approach for a length of 250 feet to provide a left turn lane and a right turn lane. This mitigation is also recommended to mitigate the intersection impact. This mitigation measure would reduce the anticipated queues on the off-ramp during both the AM and PM peak hours, and therefore the available storage lengths on the ramps are adequate for the anticipated queues. The impact after mitigation would be *less-than significant*.

Table 15 shows the comparison of the queue length and the available storage length with and without mitigations for the impacted freeway off-ramps.

#### **Bicycle System Impacts**

No mitigation measures are required.

#### **Pedestrian System Impacts**

No mitigation measures are required.

#### **Transit Impacts**

No mitigation measures are required.

Table 16: Baseline Plus Project Conditions – Summary of Mitigation Measures for Impacted Freeway Ramps

Location	Storage	Withou	t Mitigation	With Mitigation	
	Capacity (ft)	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity
AM Peak Hour					
I-80 WB Off-ramp to W. El Camino					
SBL	1,200	1,280	NO	575	YES
PM Peak Hour					
I-80 WB Off-ramp to W. El Camino					
SBL	1,200	1,235	NO	500	YES
I-80 EB Off-ramp to W. El Camino	1,000	1,870	NO	875	YES
NOTE: Bolded values indicate a queue	greater than	the stora	age capacity.		

# Cumulative No Project Conditions – 4 Lanes on West El Camino Avenue (Year 2025)

Cumulative conditions were analyzed to determine the effect of the Proposed Project in combination with the effects of buildout of the South Natomas Community Plan (SNCP). Cumulative traffic volumes for 2025 AM and PM peak hours were developed from the SACMET 2025 model after incorporating necessary modifications.

The analyses of all operations were based on the methods described for the analysis of baseline conditions.

All the analysis under this scenario is based on the assumptions as per the Year 2025 buildout of SNCP and therefore, the analysis reflects the assumption that Gateway Oaks Drive Extension will take place as per SNCP.

The following roadway network and intersection improvements (beyond those identified under baseline conditions) were incorporated for the cumulative conditions analysis. These improvements are based on SNCP as well as the MTP project list.

 Expansion of the West El Camino overcrossing at I-80 from two to four lanes;

- Installation of a traffic signal at the West EL Camino Avenue/I-80 Eastbound Ramps intersection. Modify this intersection to provide dual left-turn lanes and an exclusive right-turn lane from the off-ramp:
- Installation of a traffic signal at the West El Camino Avenue/I-80 Westbound Ramps; and
- Construct a northbound entrance ramp and southbound exit ramp at the I-5/West El Camino Avenue interchange.
- Reconstruct ramp from eastbound to northbound traffic at the I-5/I-80 Interchange.

A summary of the lane configurations and traffic controls for Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions is shown in Figure 17.

#### Intersection Levels of Service

Table 16 summarizes the level of service results for the study intersections under the Cumulative No Project (with 4 lanes on West El Camino Avenue) scenario. The calculations are presented in Appendix B. The AM and PM peak hour turning movement traffic volumes are shown in Figures 18 and 19, respectively. As seen in Table 16, all intersections would operate at an acceptable level of service of C or better under the Cumulative No Project (with 4 lanes on West El Camino Avenue) scenario, except for three intersections: the intersection of West El Camino Avenue and Orchard Lane would operate at LOS D during the AM peak hour; the intersection of West El Camino Avenue and Gateway Oaks Drive would operate at LOS D during the PM peak hour; and the intersection of West El Camino Avenue and Azevedo Drive would operate at LOS D during the AM peak hour.

Table 17: Cumulative No Project (with 4 lanes on West El Camino Avenue)

Conditions – Intersection Operations

		Peak Hour				
Intersection	Control	A	M	P	M	
		$LOS^1$	Delay <sup>2</sup>	LOS <sup>1</sup>	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off- Ramp	Signal	В	18.1	В	17.7	
West El Camino Ave. / I-80 EB Off- Ramp	Signal	В	17.5	С	27.2	
West El Camino Ave. / Orchard Ln	Signal	D	36.8	C	34.8	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (C)	1.0 (18.4)	A (E)	1.7 (46.2)	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	N/A	N/A	
West El Camino Ave. / Gateway Oaks Dr.	Signal	С	32.0	D	41.3	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	20.2	С	21.8	
West El Camino Ave. / Azevedo Dr.	Signal	D	43.6	С	31.6	
West El Camino Ave. / Truxel Rd	Signal	С	30.7	C	34.7	

 $<sup>^{1}</sup>$  LOS = Level of Service; A (E) = Average LOS (Worst Movement)

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose.

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

**Lanes & Traffic Control** 2 3 5 W. EI I-80 WB Off-Ramp W. EI Camino Ave W. EI Camino Ave W. El Camino Ave MY (\* East Project Driv eway (Proposed) W. El Camino Ave I-80 EB Off-Ramp W. River Dr Orchard Lane 6 7 8 Azev edo Dr 9 W. EI W. El W. El Camino Ave I-5 NB Off-Ramp Gateway Oaks Dr San Juan Rd Orchard Project Site 8 W. El Camino Av Garden Hwy Richards Blvd

Figure 17. Cumulative No Project (with 4 lanes on West El Camino Avenue)

Lanes & Traffic Control

Figure 18. Cumulative No Project (with 4 lanes on West El Camino Avenue)

AM Peak Hour Traffic Volumes

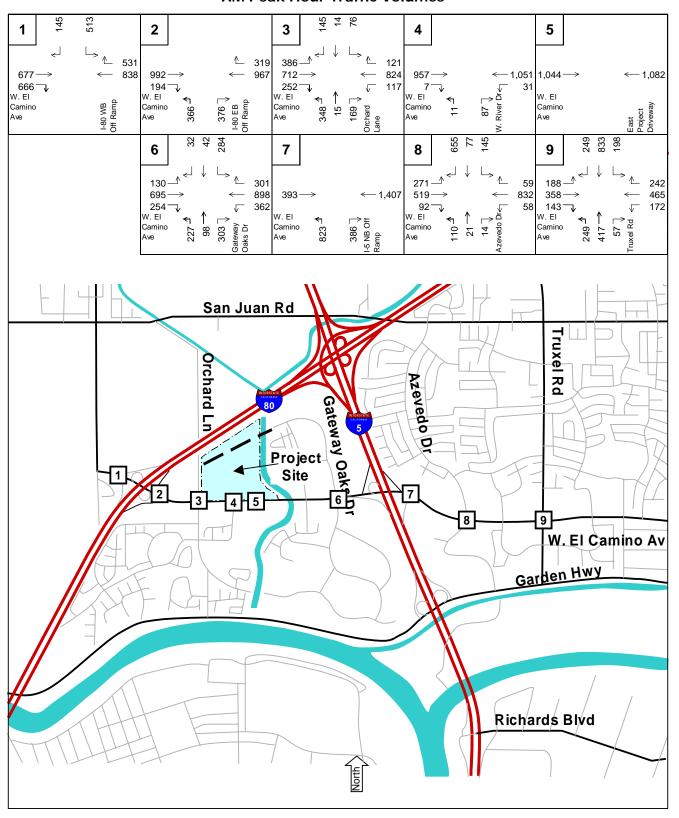
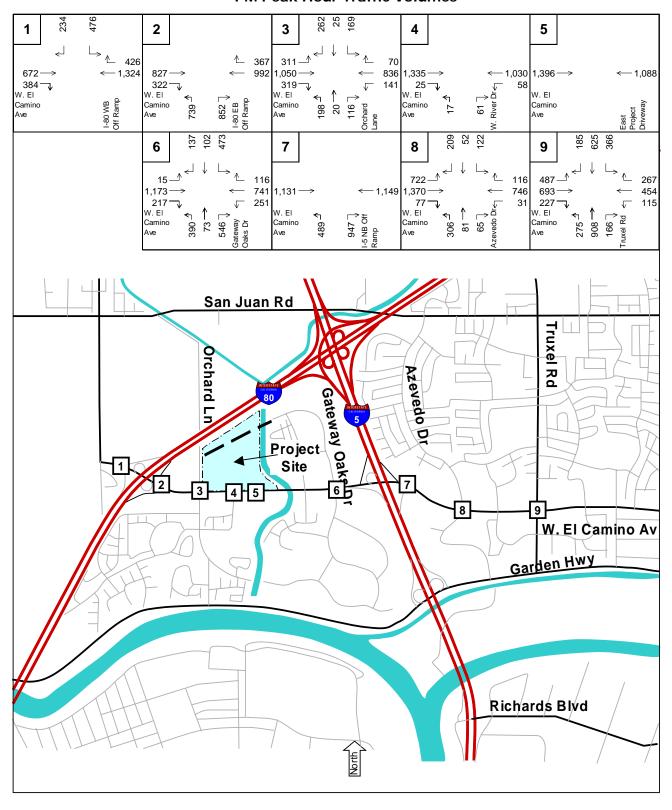


Figure 19. Cumulative No Project (with 4 lanes on West El Camino Avenue)
PM Peak Hour Traffic Volumes



#### **Signal Warrant Analysis**

Since none of the stop sign controlled intersections would operate at LOS D or worse, signal warrant analysis was not needed for the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions.

#### **Street Segments**

Table 17 summarizes the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes on study area street segments. The Average Daily Traffics for the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions is shown in Figure 20. Under the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions, all study street segments would operate at acceptable LOS, except for the segment of West El Camino Avenue between I-80 EB ramp sand Orchard Lane, where it would operate at LOS D.

#### Freeway Off-Ramps

Freeway Off-Ramps were analyzed to determine whether the available storage lengths are adequate for the anticipated queues. Table 18 presents the comparison of the queue length and the storage length for the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions. All three freeway off-ramps would have adequate capacity to store the anticipated queue.

Table 18: Cumulative No Project (with 4 lanes on West El Camino Avenue)

Conditions – Street Segments

Street	Location	Number of Lanes	Avg. Weekday Traffic Volumes	LOS	V/C
W. El Camino Ave	Between El Centro Rd and I- 80 WB ramps	4	25,580	С	0.71
W. El Camino Ave	Between I-80 EB ramps and Orchard Ln	4	29,760	D	0.83
W. El Camino Ave	Between Orchard Ln and River Oaks Way (Proposed)/West River Drive	4	24,070	В	0.67
W. El Camino Ave	Between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)	4	24,840	В	0.69
W. El Camino Ave	Between East Project Driveway (Proposed) and Grasslands Way	4	24,840	В	0.69
W. El Camino Ave	Between Grassland Way and Gateway Oaks Dr	4	26,730	С	0.74
W. El Camino Ave	Between Gateway Oaks Dr and I-5 SB ramps	5	33,000	С	0.73
W. El Camino Ave	Between I-5 NB ramps and Azevedo Dr	5	34,300	С	0.76
Orchard Ln	North of W. El Camino Ave	2	8,570	A	0.57
NOTE: Bolded v	alues indicate unacceptable LOS as per (	City standards.			

Figure 20. Cumulative No Project (with 4 lanes on West El Camino Avenue)

Average Daily Traffic Volumes

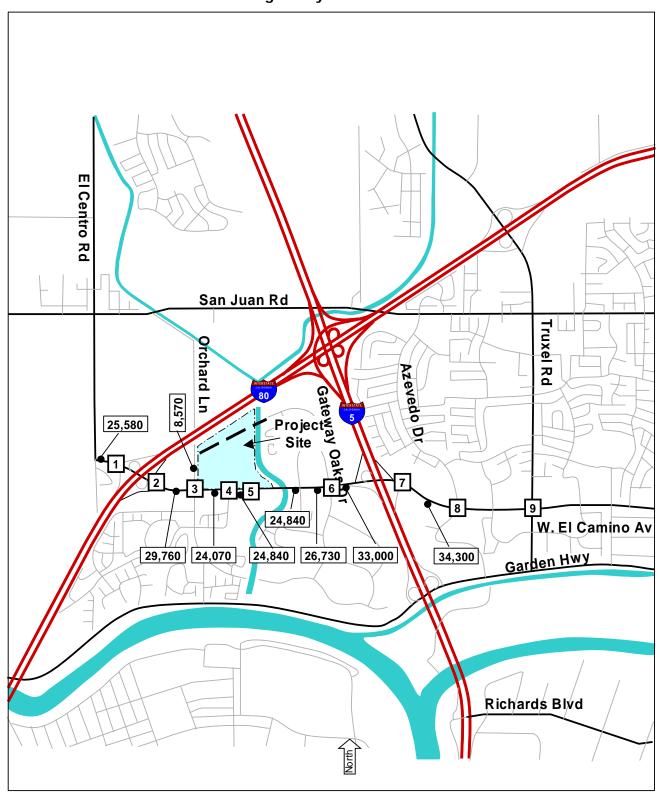


Table 19: Cumulative No Project (with 4 lanes on West El Camino Avenue)

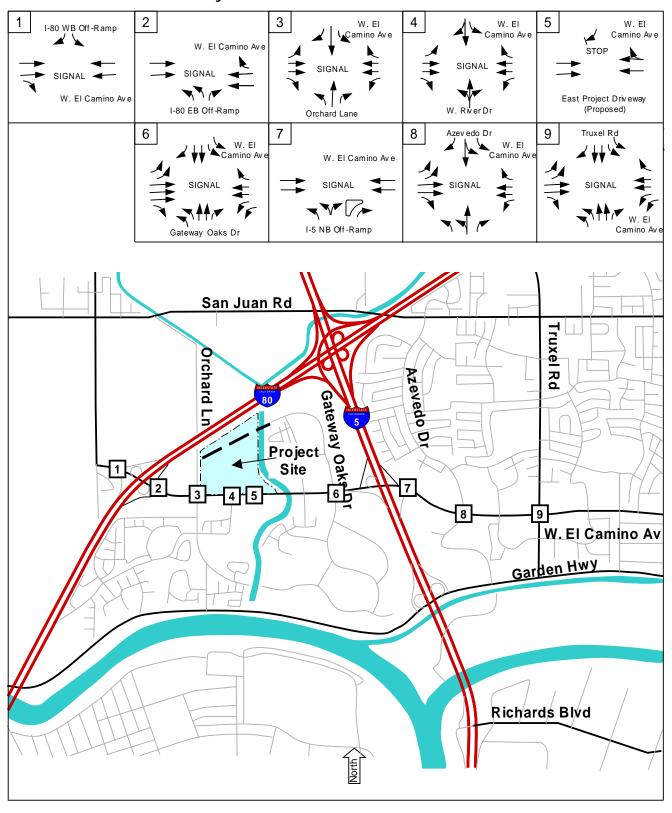
Conditions – Ramp Queuing

Location	Storage	AM Peak Hour		PM Peak Hour						
	Capacity (ft)			Queue (ft)	Adequate Capacity					
I-80 WB Off-ramp to W. El Camino Ave.										
SBL	1,200	475	YES	425	YES					
SBR	1,200	125	YES	200	YES					
I-80 EB Off-ramp to W. El Camino Ave.										
NBL	1,200	300	YES	425	YES					
NBR	1,000	325	YES	525	YES					
I-5 NB Off-ramp to W. El Camino Ave.	600	367	YES	367	YES					
NOTE: Bolded values indicate a queue greater than the storage capacity.										

# Cumulative Plus Project without Gateway Oaks Drive Extension Conditions – 4 lanes on West El Camino Avenue

For this scenario, West El Camino Avenue is assumed to be 4 lanes, and the Proposed Project proposes to eliminate the Gateway Oaks Drive Extension. Therefore, the segment of Gateway Oaks Drive over the Natomas Main Drainage Canal including the bridge for automobile traffic would not be built, and the loop road as proposed in the Community Plan will not be completed. A summary of the lane configurations and traffic controls for Cumulative Plus Project (with 4 lanes on West El Camino Avenue) with and without Gateway Oaks Drive Extension conditions is shown in Figure 21.

Figure 21. Cumulative Plus Project (with 4 lanes on West El Camino Avenue) with & without Gateway Oaks Drive Extension - Lanes & Traffic Control



# Impacts (Cumulative Plus Project without Gateway Oaks Drive Extension Conditions – 4 lanes on West El Camino Avenue)

#### Intersections

Figures 22 and 23 present the AM and PM Peak Hour Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) traffic volumes. These volumes were used to calculate the Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) level of service at the study intersections. The results of the LOS calculation are shown in Tables 19 and 20 for AM and PM peak hours, respectively.

As seen in Tables 19 and 20, all the study area intersections, except two as described in the following discussion, are expected to operate at an acceptable LOS under the Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) scenario, in accordance with the City's standards of significance. The Proposed Project traffic would create **significant impacts** at the intersection of West El Camino Avenue/Gateway Oaks Drive.

A) West El Camino Avenue/Gateway Oaks Drive (#6)

The addition of the Proposed Project peak hour traffic would increase the delay at the West El Camino Avenue/Gateway Oaks Drive intersection by more than 5 seconds and exacerbate the LOS D conditions in the PM peak hour. This is therefore considered a *significant impact*.

#### Signal Warrant Analysis

Since none of the stop sign controlled intersections would operate at LOS D or worse, signal warrant analysis was not needed for the Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions.

#### Street Segments

Table 21 summarizes the Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes on study street segments, and Figure 24 shows the ADT graphically.

Figure 22. Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West EL Camino Avenue) AM Peak Hour Traffic Volumes

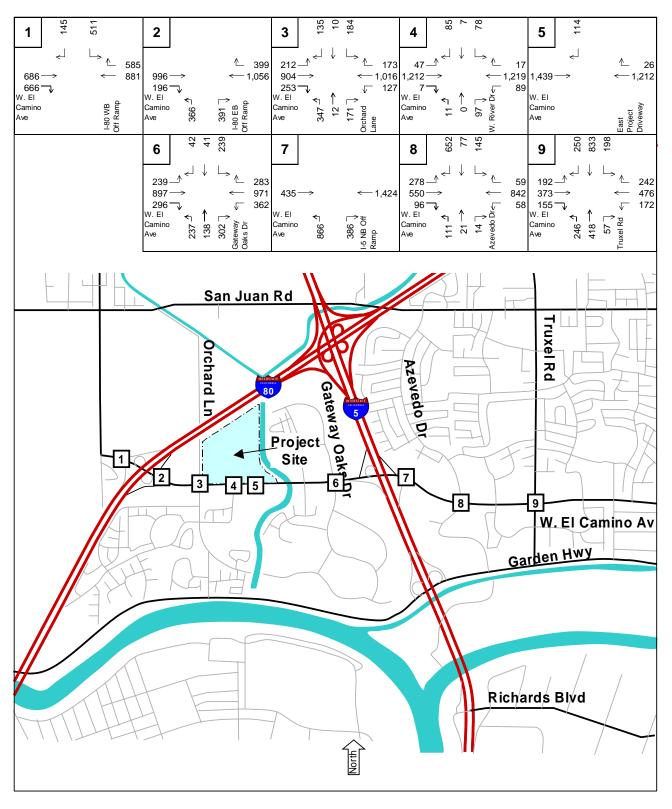


Figure 23. Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West EL Camino Avenue) PM Peak Hour Traffic Volumes

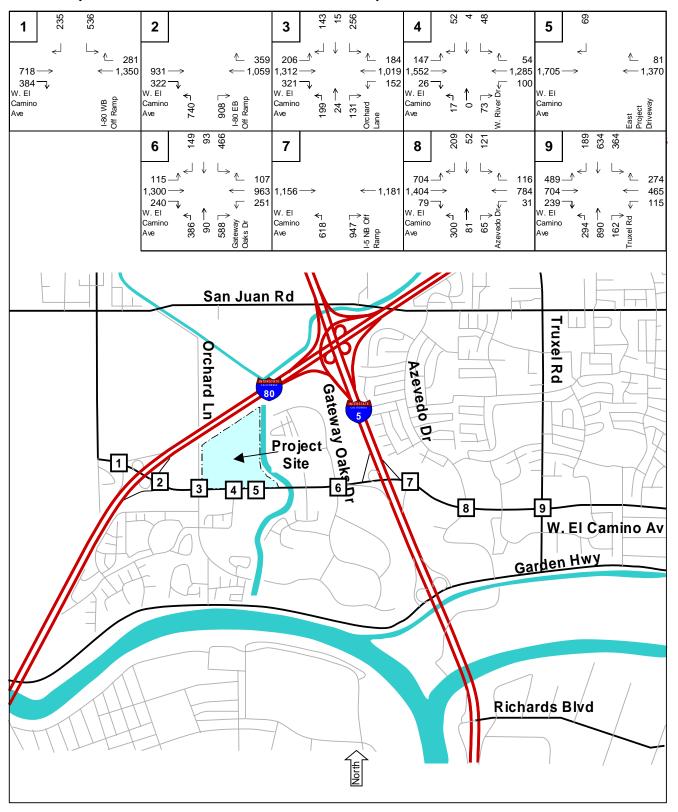


Table 20: Cumulative Conditions without Gateway Oaks Drive Extension (with 4 lanes on West EL Camino Avenue) – Intersection Operations for AM Peak Hour

Intersection	Cumulative No Project			Cumulative Plus Project without Gateway Oaks Drive Extension		
	Control	$LOS^1$	Delay <sup>2</sup>	Control	LOS1	Delay <sup>2</sup>
West El Camino Ave. / I-80 WB Off- Ramp	Signal	В	18.1	Signal	В	18.0
West El Camino Ave. / I-80 EB Off- Ramp	Signal	В	17.5	Signal	В	17.7
West El Camino Ave. / Orchard Ln	Signal	D	36.8	Signal	С	33.2
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (C)	1.0 (18.4)	Signal	В	18.3
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (C)	0.7 (16.1)
West El Camino Ave. / Gateway Oaks Dr.	Signal	С	32.0	Signal	C	31.9
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	20.2	Signal	С	20.6
West El Camino Ave. / Azevedo Dr.	Signal	D	43.6	Signal	D	43.9
West El Camino Ave. / Truxel Rd	Signal	C	30.7	Signal	C	30.7

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

NOTE: Locations with significant impacts are shaded.

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose  $\frac{1}{2}$ 

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Table 21: Cumulative Conditions without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) – Intersection Operations for PM Peak Hour

Intersection	Cumulat	ive No	Project	Cumulative Plus Project without Gateway Oaks Drive Extension			
	Control	$LOS^1$	Delay <sup>2</sup>	Control	LOS1	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off- Ramp	Signal	В	17.7	Signal	В	19.2	
West El Camino Ave. / I-80 EB Off- Ramp	Signal	С	27.2	Signal	C	30.8	
West El Camino Ave. / Orchard Ln	Signal	С	34.8	Signal	С	30.8	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (E)	1.7 (46.2)	Signal	В	19.8	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (C)	0.4 (16.9)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	D	41.3	Signal	D	47.2	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	21.8	Signal	С	22.1	
West El Camino Ave. / Azevedo Dr.	Signal	С	31.6	Signal	С	31.5	
West El Camino Ave. / Truxel Rd	Signal	С	34.7	Signal	C	34.8	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

NOTE: Locations with significant impacts are shaded.

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose  $\frac{1}{2}$ 

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Table 22: Cumulative Conditions (with 4 lanes on West El Camino Avenue) – Street Segments

Street	Location	# of Project Gateway Cannot Extend the Cumulative No Project Gateway Cannot Extend the Cumulative No Project with Cannot Extend the Cannot Extend t				ct with way Oa	out aks	
			ADT	LOS	V/C	ADT	LOS	V/C
W. El Camino Ave	Between El Centro Rd and I-80 WB ramps	4	25,580	C	0.71	27,300	C	0.76
W. El Camino Ave	Between I-80 EB ramps and Orchard Ln	4	29,760	D	0.83	32,000	D	0.89
W. El Camino Ave	Between Orchard Ln and River Oaks Way (Proposed)/West River Drive	4	24,070	В	0.67	30,790	D	0.86
W. El Camino Ave	Between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)	4	24,840	В	0.69	31,440	D	0.87
W. El Camino Ave	Between East Project Driveway (Proposed) and Grasslands Way	4	24,840	В	0.69	31,560	D	0.88
W. El Camino Ave	Between Grassland Way and Gateway Oaks Dr	4	26,730	С	0.74	31,530	D	0.88
W. El Camino Ave	Between Gateway Oaks Dr and I-5 SB ramps	5	33,000	С	0.73	36,750	D	0.82
W. El Camino Ave	Between I-5 NB ramps and Azevedo Dr	5	34,300	С	0.76	34,800	С	0.77

Table 23: Cumulative Conditions (with 4 lanes on West El Camino Avenue) – Street Segments (continued)

Street	Location	# of Lanes	Cumulative No Project			Cumulative Plus Project without Gateway Oaks Drive Extension		
			ADT	LOS	V/C	ADT	LOS	V/C
Orchard Ln	North of W. El Camino Ave	2	8,570	A	0.57	6,503	A	0.55
Riverdale Dr (Proposed)	East of Orchard Ln	2	-	-	-	1,680	A	0.11
Riverdale Dr (Proposed)	Between River Oaks Way (Proposed) and East Terminal	2	-	-	-	610	A	0.04
River Oaks Way (Proposed)	North of W. El Camino Ave	2	-	-	-	3,050	A	0.20

NOTE: Bolded values indicate unacceptable LOS as per City standards.

Locations with significant impacts are shaded.

As seen in Table 21, the Proposed Project traffic would create **significant impacts** on the following six street segments:

A) West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane

The addition of the Proposed Project traffic would increase the v/c ratio on West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane by more than 0.02 and exacerbate the LOS D conditions. This is therefore considered a *significant impact*.

B) West El Camino Avenue between Orchard Lane and River Oaks Way (Proposed)/West River Drive

With the addition of the Proposed Project traffic, the LOS on West El Camino Avenue between Orchard Lane and River Oaks Way (Proposed)/West River Drive would degrade from the Cumulative No Project (with 4 lanes on West El Camino Avenue) LOS B to LOS D, resulting into a *significant impact* on this street segment.

C) West El Camino Avenue between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)

With the addition of the Proposed Project traffic, the LOS on West El Camino Avenue between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed) would degrade from the Cumulative No Project (with 4 lanes on West El Camino Avenue) LOS B to LOS D, resulting into a *significant impact* on this street segment.

D) West El Camino Avenue between East Project Driveway (Proposed) and Grasslands Way

With the addition of the Proposed Project traffic, the LOS on West El Camino Avenue between East Project Driveway (Proposed) and Grasslands Way would degrade from the Cumulative No Project (with 4 lanes on West El Camino Avenue) LOS B to LOS D, resulting into a significant impact on this street segment.

E) West El Camino Avenue between Grassland Way and Gateway Oaks Drive

With the addition of the Proposed Project traffic, the LOS on West El Camino Avenue between Grassland Way and Gateway Oaks Drive would degrade from the Cumulative No Project (with 4 lanes on West El Camino Avenue) LOS C to LOS D, resulting into a *significant impact* on this street segment.

F) West El Camino Avenue between Gateway Oaks Drive and I-5 SB ramps

With the addition of the Proposed Project traffic, the LOS on West El Camino Avenue between Gateway Oaks Drive and I-5 SB ramps would degrade from the Cumulative No Project (with 4 lanes on West El Camino Avenue) LOS C to LOS D, resulting into a *significant impact* on this street segment.

#### Freeway Off-Ramps

Tables 22 and 23 present the comparison of the queue length and the available storage length for the Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) scenario for AM and PM peak hours, respectively. All freeway off-ramps would have adequate storage capacity for the anticipated queues. The implementation of the Proposed Project would result in *no impact* to the freeway off-ramps under the Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) scenario.

Figure 24. Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) Average Daily Traffic Volumes

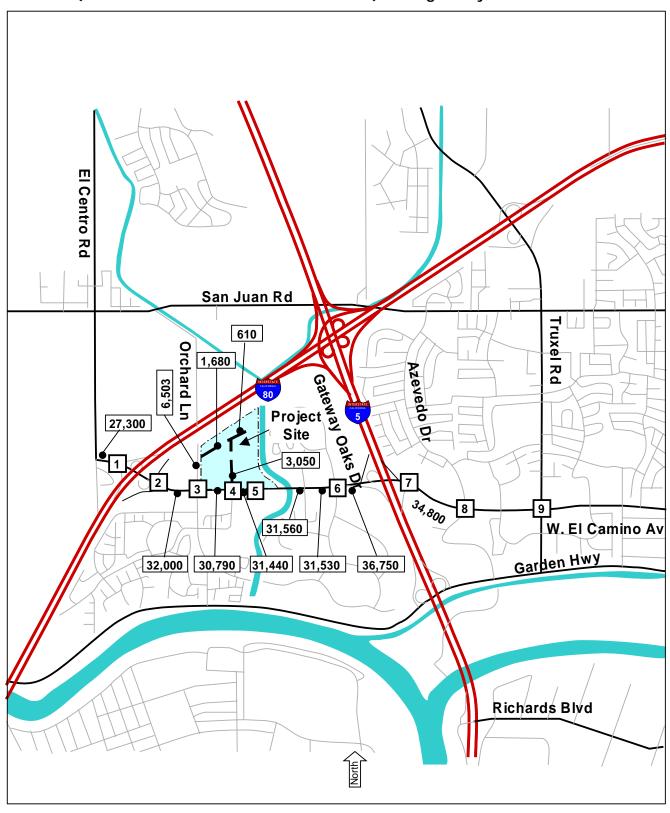


Table 24: Cumulative (with 4 lanes on West El Camino Avenue) Conditions – Ramp Queuing for AM Peak Hour

Location	Storage		ulative No roject	Cumulative Plu Project withou Gateway Oaks Drive Extension			
	Capacity (ft)	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity		
I-80 WB Off-ramp to W. El Camino							
SBL	1,200	475	YES	475	YES		
SBR	1,200	125	YES	125	YES		
I-80 EB Off-ramp to W. El Camino							
NBL	1,200	300	YES	300	YES		
NBR	1,000	325	YES	325	YES		
I-5 NB Off-ramp to W. El Camino	600	367	YES	367	YES		
NOTE: Bolded values indicate a queue greater than the storage capacity.							

Table 25: Cumulative (with 4 lanes on West El Camino Avenue) Conditions – Ramp Queuing for PM Peak Hour

Location	Storage		ulative No roject	Project Gates	ative Plus et without way Oaks Extension		
	~	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity		
I-80 WB Off-ramp to W. El Camino							
SBL	1,200	425	YES	475	YES		
SBR	1,200	200	YES	200	YES		
I-80 EB Off-ramp to W. El Camino							
NBL	1,200	425	YES	425	YES		
NBR	1,000	525	YES	550	YES		
I-5 NB Off-ramp to W. El Camino	600	367 YES		408	YES		
NOTE: Bolded values indicate a queue greater than the storage capacity.							

# **Bicycle System Impacts**

Development of the Proposed Project would result in an increase in bicycle trips in the study area by residents and visitors. However, the Proposed Project is not anticipated to hinder or eliminate the existing bikeways or interfere with the implementation of the planned bikeways in the study area. Moreover, the development of the Proposed Project would result in additional bikeway improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal.

As a result, the implementation of the Proposed Project would result in **no** *impact* to the bicycle system.

#### **Pedestrian System Impacts**

Development of the Proposed Project would result in an increase in pedestrian trips in the study area by residents and visitors. However, the Proposed Project is not anticipated to result in an unsafe condition for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflict. Moreover, the development of the Proposed Project would result in additional pedestrian improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal.

As a result, the implementation of the Proposed Project would result in **no** *impact* to the pedestrian system.

#### **Transit Impacts**

Development of the Proposed Project would result in an increase in demand for transit. Currently, Regional Transit District's Bus Routes 88 and 89 provide transit services in the vicinity of the Project site. The nominal transit usage generated by the Proposed Project is not anticipated to exceed the capacity of the available/planned transit system in the study area. The implementation of the Proposed Project would result in *no impact* to the transit system.

# Mitigation Measures (Cumulative Plus Project without Gateway Oaks Drive Extension Conditions – 4 lanes on West El Camino Avenue)

#### Intersection

The necessary mitigation measures required to offset the significant traffic impacts at study intersection are discussed below:

A) West El Camino Avenue/Gateway Oaks Drive (#6)

Provide overlap traffic signal phasing to allow northbound Gateway Oaks Drive right turning traffic to proceed on a green arrow simultaneously with the westbound West El Camino Avenue left turning movement, and prohibit U-turns for the westbound left turning movement. This mitigation measure would reduce the delay to less than 5 seconds compared to the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions during the PM peak hour. The impact after mitigation would be *less-than significant*.

Figure 25 illustrates the effects of the feasible mitigation measures on traffic operations for the Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions. Table 24 shows the LOS and delay with and without mitigations for the impacted intersections.

Figure 25. Intersection Lane Configurations and controls - Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) with Mitigation Measures

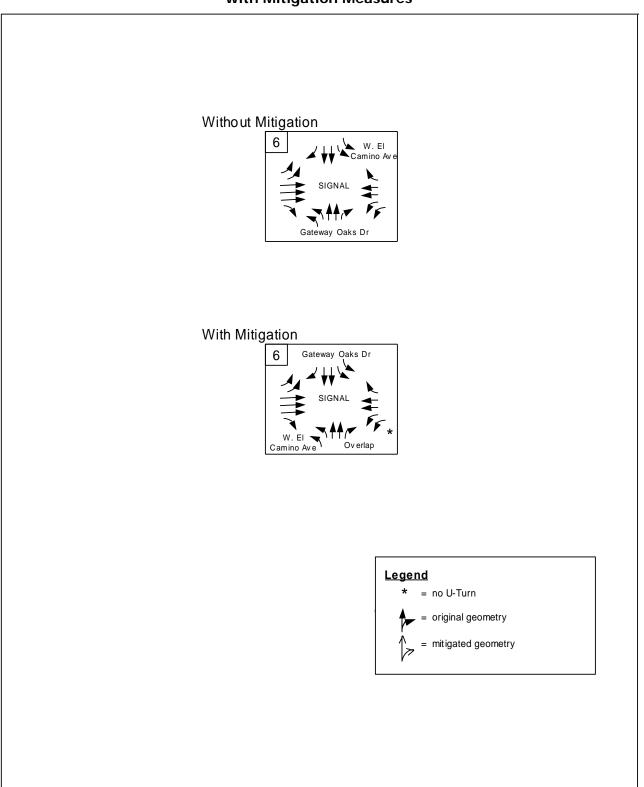


Table 26: Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) Conditions – Summary of Mitigation Measures for Impacted Intersections

Intersection	Withou	ıt Mitig	gation	With Mitigation				
	Control	LOS1	Delay <sup>2</sup>	Control	LOS1	Delay <sup>2</sup>		
AM Peak Hour								
West El Camino Ave. / Gateway Oaks Dr.	Signal	C	31.9	Signal	С	26.4		
PM Peak Hour								
West El Camino Ave. / Gateway Oaks Dr.	Signal	D	47.2	Signal	D	38.7		

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

NOTE: Bolded values indicate non-compliance with City standards.

Locations with significant impacts are shaded.

#### **Street Segments**

A) - F) West El Camino Avenue between I-80 EB Ramps and I-5 SB Ramps

The necessary mitigation measures required to offset the significant traffic impacts of the proposed project on the street segments mentioned above to less than significant levels is to widen West El Camino Avenue from 4-lanes to 6-lanes between I-80 and I-5, which would also require widening I-80 overcrossing to 6-lanes and reconstructing the bridge over Natomas Main Drainage Canal.

As discussed earlier, the City is in the process of widening West El Camino Avenue to 4-lanes between Orchard Lane and Natomas Main Drainage Canal at the time of this analysis. At present no definite funding source has been identified for widening West El Camino Avenue to 6-lanes; as per Metropolitan Transportation Plan (MTP) for 2025 widening West El Camino Avenue to 6-lanes is included only for the segments between I-80 and Natomas Main Drainage Canal under Tier 2 improvement category (no definite funding identified). Widening West El Camino Avenue to 6-lanes east of Natomas Main Drainage Canal has yet not been programmed/funded

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

at any level. Furthermore, implementation of this mitigation measure would require Caltrans' approval for the work within the limits of interchanges and overcrossings at I-80 as well as I-5, and may require additional right-of-ways over which the applicant has no control.

In view of the above, this mitigation measure is infeasible and it is not being able to be accomplished in a reasonably foreseeable manner. The impact of the proposed project is therefore, considered *significant and unavoidable*.

It may also be noted that as outlined under *Regulatory and Planning Context*, the City is investigating the option of not widening West El Camino Avenue to more than 4-lanes. This approach is consistent with: (i) City's smart growth principles that identify the need for a balanced transportation system, including ensuring improved walkability and improved bicycle friendly infrastructure, (ii) upcoming General Plan update which aims at reexamining the current LOS C goal and recognize alternative transportation mode opportunities, support developments in infill areas and near transit stations. The traffic operations with and without River Oaks project under both the scenarios, i.e. considering West El Camino Avenue as a 4-lane vs. 6-lane facility are evaluated and compared in different sections of this study.

#### Freeway Off-Ramps

No mitigation measures are required.

#### **Bicycle System Impacts**

No mitigation measures are required.

#### **Pedestrian System Impacts**

No mitigation measures are required.

### **Transit Impacts**

No mitigation measures are required.

# Cumulative Plus Project with Gateway Oaks Drive Extension Conditions – 4 lanes on West El Camino Avenue

The Gateway Oaks Drive Extension to Orchard Lane is called for in the current South Natomas Community Plan (SNCP). The traffic operations under Cumulative Plus Project with Gateway Oaks Drive Extension scenario are analyzed in this section. This analysis will provide a comparison with traffic operations without Gateway Oaks Drive Extension condition as analyzed in the previous section.

Similar to the previous section (without Gateway Oaks Drive Extension), the analysis under this section also assumes that West El Camino Avenue would

be 4 lanes. A summary of the lane configurations and traffic controls for Cumulative Plus Project (with 4 lanes on West El Camino Avenue) with and without Gateway Oaks Drive Extension conditions is shown in Figure 21.

# Impacts (Cumulative Plus Project with Gateway Oaks Drive Extension Conditions – 4 lanes on West El Camino Avenue)

#### **Intersections**

Figures 26 and 27 present the AM and PM Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) traffic volumes. These volumes were used to calculate the Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) level of service at the study intersections. The results of the LOS calculation are shown in Tables 25 and 26 for AM and PM peak hours, respectively.

As seen in Tables 25 and 26, all the study area intersections, except one as described in the following discussion, are expected to operate at an acceptable LOS conditions under the Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) scenario, in accordance with the City's standards of significance. The Proposed Project traffic would create **significant impacts** at the intersection of West El Camino Avenue/Orchard Lane.

#### A) West El Camino Avenue/Orchard Lane (#3)

The addition of the Proposed Project peak hour traffic would increase the delay at the West El Camino Avenue/ Orchard Lane intersection by more than 5 seconds and exacerbate the LOS D conditions in the AM peak hour. During the PM peak hour, the addition of the Proposed Project peak hour traffic would degrade the LOS from LOS C to D. This is therefore considered a *significant impact*.

### Signal Warrant Analysis

Since none of the stop sign controlled intersections would operate at LOS D or worse, signal warrant analysis was not needed for the Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions.

#### **Street Segments**

Table 27 summarizes the Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes on study street segments, and Figure 28 shows the ADT graphically.

Figure 26. Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West EL Camino Avenue) AM Peak Hour Traffic Volumes

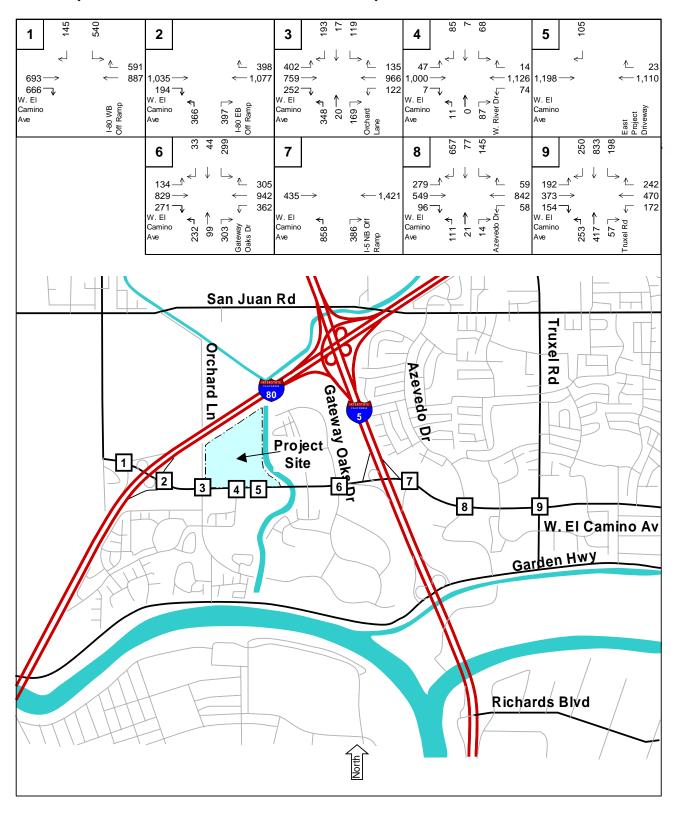


Figure 27. Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camimo Avenue) PM Peak Hour Traffic Volumes

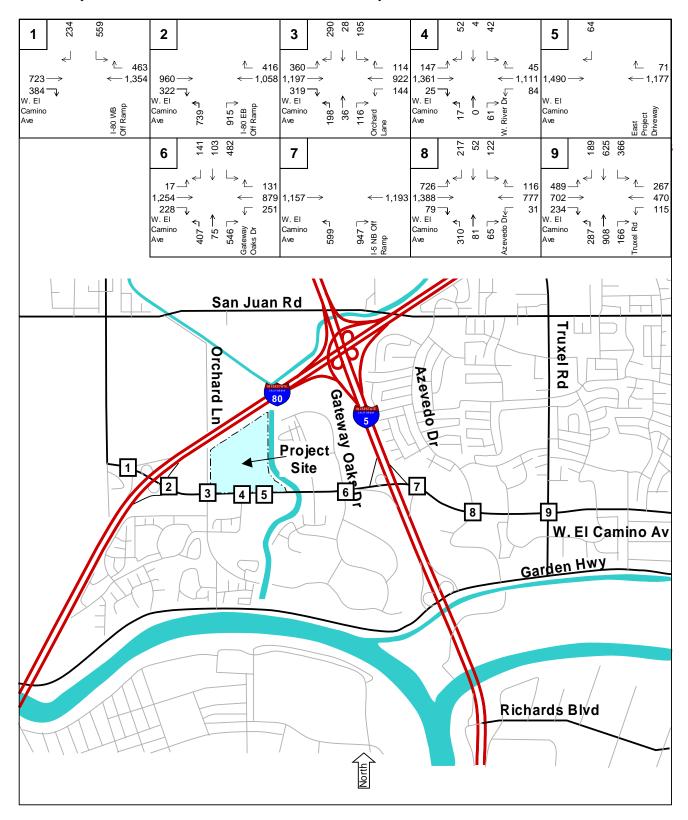


Table 27: Cumulative Conditions (with 4 lanes on West El Camino Avenue) – Intersection Operations for AM Peak Hour

Intersection	Cumulat	ive No	Project	Cumulative Plus Project with Gateway Oaks Drive Extension			
	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	Control	LOS1	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off- Ramp	Signal	В	18.1	Signal	В	18.8	
West El Camino Ave. / I-80 EB Off- Ramp	Signal	В	17.5	Signal	В	17.8	
West El Camino Ave. / Orchard Ln	Signal	D	36.8	Signal	D	42.8	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (C)	1.0 (18.4)	Signal	В	17.4	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (B)	0.6 (14.8)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	C	32.0	Signal	C	32.2	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	20.2	Signal	C	20.5	
West El Camino Ave. / Azevedo Dr.	Signal	D	43.6	Signal	D	44.4	
West El Camino Ave. / Truxel Rd	Signal	С	30.7	Signal	C	30.8	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

NOTE: Locations with significant impacts are shaded.

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose  $\frac{1}{2}$ 

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Table 28: Cumulative Conditions (with 4 lanes on West El Camino Avenue) – Intersection Operations for PM Peak Hour

Intersection	Cumulat	ive No	Project	Cumulative Plus Project with Gateway Oaks Drive Extension			
	Control	$LOS^1$	Delay <sup>2</sup>	Control	LOS1	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off- Ramp	Signal	В	17.7	Signal	В	19.8	
West El Camino Ave. / I-80 EB Off- Ramp	Signal	C	27.2	Signal	C	32.2	
West El Camino Ave. / Orchard Ln	Signal	С	34.8	Signal	D	37.7	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (E)	1.7 (46.2)	Signal	В	18.5	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (B)	0.3 (14.7)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	D	41.3	Signal	D	42.8	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	21.8	Signal	С	22.1	
West El Camino Ave. / Azevedo Dr.	Signal	С	31.6	Signal	С	32.8	
West El Camino Ave. / Truxel Rd	Signal	С	34.7	Signal	C	34.8	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

NOTE: Locations with significant impacts are shaded.

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose  $\frac{1}{2}$ 

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Table 29: Cumulative Conditions (with 4 lanes on West El Camino Avenue) – Street Segments

Street	Location	# of Project Cumulative No Project volume External Cumulative No Project Cateway Company Cumulative No Project volume External Cumulative No Proje				# of Cumulative No Project Gatewa	ject wi way Oa	ect with vay Oaks	
			ADT	LOS	V/C	ADT	LOS	V/C	
W. El Camino Ave	Between El Centro Rd and I-80 WB ramps	4	25,580	C	0.71	27,570	C	0.77	
W. El Camino Ave	Between I-80 EB ramps and Orchard Ln	4	29,760	D	0.83	32,860	E	0.91	
W. El Camino Ave	Between Orchard Ln and River Oaks Way (Proposed)/West River Drive	4	24,070	В	0.67	27,130	С	0.75	
W. El Camino Ave	Between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)	4	24,840	В	0.69	27,310	С	0.76	
W. El Camino Ave	Between East Project Driveway (Proposed) and Grasslands Way	4	24,840	В	0.69	27,380	С	0.76	
W. El Camino Ave	Between Grassland Way and Gateway Oaks Dr	4	26,730	С	0.74	29,260	D	0.81	
W. El Camino Ave	Between Gateway Oaks Dr and I-5 SB ramps	5	33,000	С	0.73	35,430	С	0.79	
W. El Camino Ave	Between I-5 NB ramps and Azevedo Dr	5	34,300	С	0.76	34,970	С	0.78	

Table 30: Cumulative Conditions (with 4 lanes on West El Camino Avenue) – Street Segments (continued)

Street	Location	# of Lanes	Cumulative No Project			Proj Gate	lative lect wit way Oa Extens	th aks
			ADT	LOS	V/C	ADT	LOS	V/C
Orchard Ln	North of W. El Camino Ave	2	8,570	A	0.57	10,230	В	0.68
Riverdale Dr (Proposed)	East of Orchard Ln	2	-	-	-	7,190	A	0.48
Riverdale Dr (Proposed)	River Oaks Way (Proposed) and East Terminal	2	-	-	-	6,234	A	0.42
River Oaks Way (Proposed)	North of W. El Camino Ave	2	-	-	-	2,900	A	0.19

NOTE: Bolded values indicate unacceptable LOS as per City standards.

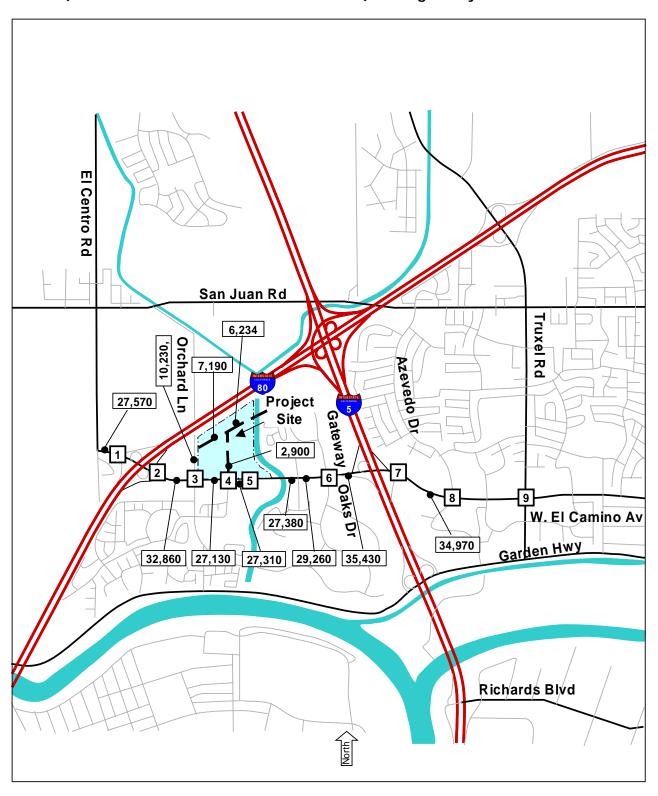
Locations with significant impacts are shaded.

As seen in Table 27, the Proposed Project traffic would create **significant impacts** on the following two street segments:

A) West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane

With the addition of the Proposed Project traffic, the LOS on West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane would degrade from the Cumulative No Project (with 4 lanes on West El Camino Avenue) LOS D to LOS E, resulting into a *significant impact* on this street segment.

Figure 28. Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West EL Camino Avenue) Average Daily Traffic Volumes



B) West El Camino Avenue between Grassland Way and Gateway Oaks Drive

With the addition of the Proposed Project traffic, the LOS on West El Camino Avenue between Grassland Way and Gateway Oaks Drive would degrade from the Cumulative No Project (with 4 lanes on West El Camino Avenue) LOS C to LOS D, resulting into a *significant impact* on this street segment.

#### Freeway Off-Ramps

All freeway off-ramps would have adequate storage capacity for the anticipated queues. The implementation of the Proposed Project would result in *no impact* to the freeway off-ramps under the Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) scenario. Tables 28 and 29 present the comparison of the queue length and the available storage length for the Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) scenario for AM and PM peak hours, respectively.

Table 31: Cumulative (with 4 lanes on West El Camino Avenue) Conditions – Ramp Queuing for AM Peak Hour

Location	Storage		ulative No roject	Cumulative Plus Project with Gateway Oaks Drive Extension		
	~ •	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity	
I-80 WB Off-ramp to W. El Camino						
SBL	1,200	475	YES	500	YES	
SBR	1,200	125	YES	125	YES	
I-80 EB Off-ramp to W. El Camino						
NBL	1,200	300	YES	300	YES	
NBR	1,000	325	YES	325	YES	
I-5 NB Off-ramp to W. El Camino	600	367	YES	367	YES	

NOTE: Bolded values indicate a queue greater than the storage capacity.

Locations with significant impacts are shaded.

Table 32: Cumulative (with 4 lanes on West El Camino Avenue) Conditions – Ramp Queuing for PM Peak Hour

Location	Storage		ılative No roject	Cumulative Plus Project with Gateway Oaks Drive Extension		
	~	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity	
I-80 WB Off-ramp to W. El Camino						
SBL	1,200	425	YES	475	YES	
SBR	1,200	200	YES	200	YES	
I-80 EB Off-ramp to W. El Camino						
NBL	1,200	425	YES	400	YES	
NBR	1,000	525	YES	550	YES	
I-5 NB Off-ramp to W. El Camino	600	367 YES		375	YES	
NOTE: Bolded values indicate a queue	greater than	the stora	ge capacity.			

# **Bicycle System Impacts**

Development of the Proposed Project would result in an increase in bicycle trips in the study area by residents and visitors. However, the Proposed Project is not anticipated to hinder or eliminate the existing bikeways or interfere with the implementation of the planned bikeways in the study area. Moreover, the development of the Proposed Project would result in additional bikeway improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal.

As a result, the implementation of the Proposed Project would result in **no** *impact* to the bicycle system.

#### **Pedestrian System Impacts**

Development of the Proposed Project would result in an increase in pedestrian trips in the study area by residents and visitors. However, the Proposed Project is not anticipated to result in an unsafe condition for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflict. Moreover, the development of the Proposed Project would result in additional pedestrian improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal.

As a result, the implementation of the Proposed Project would result in **no** *impact* to the pedestrian system.

### **Transit Impacts**

Development of the Proposed Project would result in an increase in demand for transit. Currently, Regional Transit District's Bus Routes 88 and 89 provide transit services in the vicinity of the Project site. The nominal transit usage generated by the Proposed Project is not anticipated to exceed the capacity of the available/planned transit system in the study area. The implementation of the Proposed Project would result in *no impact* to the transit system.

# Mitigation Measures (Cumulative Plus Project with Gateway Oaks Drive Extension Conditions – 4 lanes on West El Camino Avenue)

#### Intersection

The necessary mitigation measures required to offset the significant traffic impacts at study intersection are discussed below:

#### A) West El Camino Avenue/Orchard Lane (#3)

Reconfigure the northbound and southbound approaches from one left turn lane, one thru lane, and one right turn lane to one left turn lane, one shared left-through lane, and one right turn lane. Change the signal phasing for the northbound/southbound approach from protected phasing to split phasing. This mitigation measure would reduce the delay to less than 5 seconds compared to the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions during the AM peak hour. During the PM peak hour, this mitigation measure would improve the level of service from LOS D to LOS C. The impact after mitigation would be *less-than significant*.

Figure 29 illustrates the effects of the mitigation measures on traffic operations for the Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions. Table 30 shows the LOS and delay with and without mitigations for the impacted intersection.

Figure 29. Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) Mitigation Measures

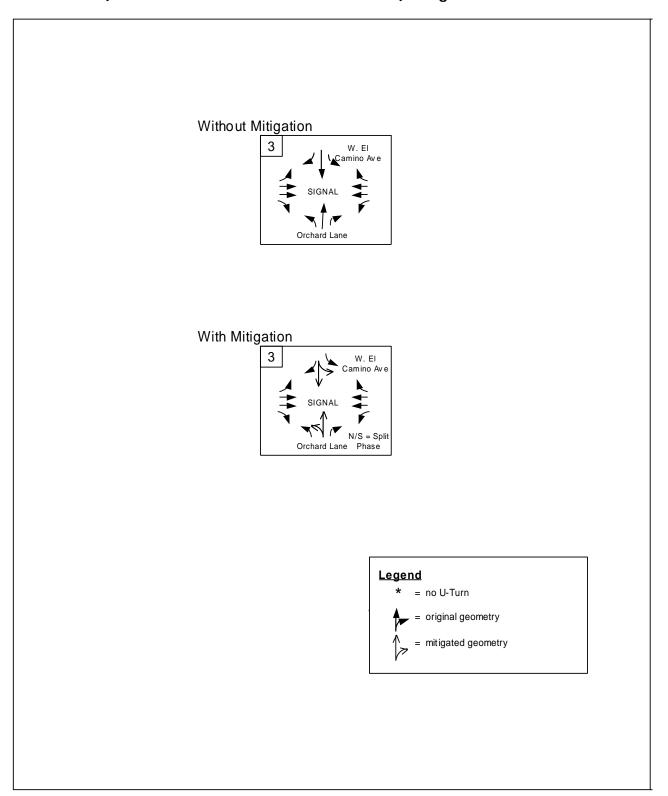


Table 33: Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) Conditions – Summary of Mitigation Measures for Impacted Intersections

Intersection	Without Mitigation			With Mitigation				
	Control	$LOS^{1}$	Delay <sup>2</sup>	Control	$LOS^1$	Delay <sup>2</sup>		
AM Peak Hour								
West El Camino Ave. / Orchard Ln	Signal	D	42.8	Signal	D	35.6		
PM Peak Hour								
West El Camino Ave. / Orchard Ln	Signal	D	37.7	Signal	С	34.7		

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

NOTE: Bolded values indicate non-compliance with City standards.

Locations with significant impacts are shaded.

#### **Street Segments**

- A) West El Camino Avenue between I-80 EB ramps and Orchard Lane
- B) West El Camino Avenue between Grassland Way and Gateway Oaks Drive

The necessary mitigation measures required to offset the significant traffic impacts of the proposed project on the street segments mentioned above to less than significant levels is to widen West El Camino Avenue from 4-lanes to 6-lanes between I-80 and I-5, which would also require widening I-80 overcrossing to 6-lanes and reconstructing the bridge over Natomas Main Drainage Canal.

As discussed earlier, the City is in the process of widening West El Camino Avenue to 4-lanes between Orchard Lane and Natomas Main Drainage Canal at the time of this analysis. At present no definite funding source has been identified for widening West El Camino Avenue to 6-lanes; as per Metropolitan Transportation Plan (MTP) for 2025 widening West El Camino Avenue to 6-lanes is included only for the segments between I-80 and Natomas Main Drainage Canal under Tier 2 improvement category (no definite funding identified). Widening West El Camino Avenue to 6-lanes east of Natomas Main Drainage Canal has yet not been programmed/funded

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

at any level. Furthermore, implementation of this mitigation measure would require Caltrans' approval for the work within the limits of interchanges and overcrossings at I-80 as well as I-5, and may require additional right-of-ways over which the applicant has no control.

In view of the above, this mitigation measure is infeasible and it is not being able to be accomplished in a reasonably foreseeable manner. The impact of the proposed project is therefore, considered *significant and unavoidable*.

It may also be noted that as outlined under *Regulatory and Planning Context*, the City is investigating the option of not widening West El Camino Avenue to more than 4-lanes. This approach is consistent with: (i) City's smart growth principles that identify the need for a balanced transportation system, including ensuring improved walkability and improved bicycle friendly infrastructure, (ii) upcoming General Plan update which aims at reexamining the current LOS C goal and recognize alternative transportation mode opportunities, support developments in infill areas and near transit stations. The traffic operations with and without River Oaks project under both the scenarios, i.e. considering West El Camino Avenue as a 4-lane vs. 6-lane facility are evaluated and compared in different sections of this study.

#### Freeway Off-Ramps

No mitigation measures are required.

#### **Bicycle System Impacts**

No mitigation measures are required.

# **Pedestrian System Impacts**

No mitigation measures are required.

# **Transit Impacts**

No mitigation measures are required.

# Cumulative No Project Conditions – 6 Lanes on West El Camino Avenue (Year 2025)

The analysis under this scenario is based on the assumptions that West El Camino Avenue would be widened to 6 lanes and Gateway Oaks Drive would be extended, in accordance with SNCP. This scenario assumes the same roadway improvements as identified under Baseline conditions and the Cumulative conditions (with 4 lanes on West El Camino Avenue). As mentioned above, West El Camino Avenue would be a 6-lane facility, and the intersection configurations are assumed accordingly.

A summary of the lane configurations and traffic controls for Cumulative No Project (with 6 lanes on West El Camino Avenue) conditions is shown in Figure 30.

#### **Intersection Levels of Service**

Table 31 summarizes the level of service results for the study intersections under the Cumulative No Project (with 6 lanes on West El Camino Avenue) scenario. The calculations are presented in Appendix B. The AM and PM peak hour turning movement traffic volumes are shown in Figures 31 and 32, respectively. As seen in Table 31, all intersections would operate at an acceptable level of service of C or better under the Cumulative No Project (with 6 lanes on West El Camino Avenue) scenario, except for three intersections: the intersection of West El Camino Avenue and Orchard Lane would operate at LOS D during the AM peak hour; the intersection of West El Camino Avenue and Gateway Oaks Drive would operate at LOS D during the PM peak hour; and the intersection of West El Camino Avenue and Azevedo Drive would operate at LOS D during the AM peak hour.

#### **Signal Warrant Analysis**

Since none of the stop sign controlled intersections would operate at LOS D or worse, signal warrant analysis was not needed per City's Traffic Impact Analysis Guidelines for the Cumulative No Project (with 6 lanes on West El Camino Avenue) conditions.

# **Street Segments**

Table 32 summarizes the Cumulative No Project (with 6 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes on study area street segments. The ADT is shown graphically in Figure 33. Under the Cumulative No Project (with 6 lanes on West El Camino Avenue) conditions, all study street segments would operate at acceptable LOS.

1 2 3 5 I-80 WB Off-Ramp W. EI W. EI W. El Camino Av e Camino Ave Camino Ave SIGNAL W. El Camino Ave East Project Driv eway (Proposed) I-80 EB Off-Ramp W. River Dr Orchard Lane 6 8 Azev edo Dr 9 Truxel Rd W. El W. EI W. El Camino Ave Camino Ave SIGNAL SIGNAL I-5 NB Off-Ramp Gateway Oaks Dr San Juan Rd Truxel Rd Orchard Azevedo Gateway Oak 6 Project Site 4 5 8 W. El Camino Av Garden Hwy Richards Blvd

Figure 30. Cumulative No Project (with 6 lanes on West El Camino Avenue)

Lanes & Traffic Control

Table 34: Cumulative No Project (with 6 lanes on West El Camino Avenue)

Conditions – Intersection Operations

	Control	Peak Hour				
Intersection		AM		PM		
		LOS <sup>1</sup>	Delay <sup>2</sup>	$LOS^1$	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off- Ramp	Signal	В	17.5	В	18.8	
West El Camino Ave. / I-80 EB Off- Ramp	Signal	В	18.9	С	25.7	
West El Camino Ave. / Orchard Ln	Signal	D	35.2	C	33.9	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (B)	0.8 (14.8)	A (D)	1.3 (32.5)	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	N/A	N/A	
West El Camino Ave. / Gateway Oaks Dr.	Signal	С	32.4	D	41.3	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	20.4	С	21.8	
West El Camino Ave. / Azevedo Dr.	Signal	D	38.1	С	31.3	
West El Camino Ave. / Truxel Rd	Signal	С	30.9	C	34.7	

 $<sup>^{\</sup>rm 1}$  LOS = Level of Service; A (E) = Average LOS (Worst Movement)

#### NOTE:

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose.

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Figure 31. Cumulative No Project (with 6 lanes on West El Camino Avenue)

AM Peak Hour Traffic Volumes

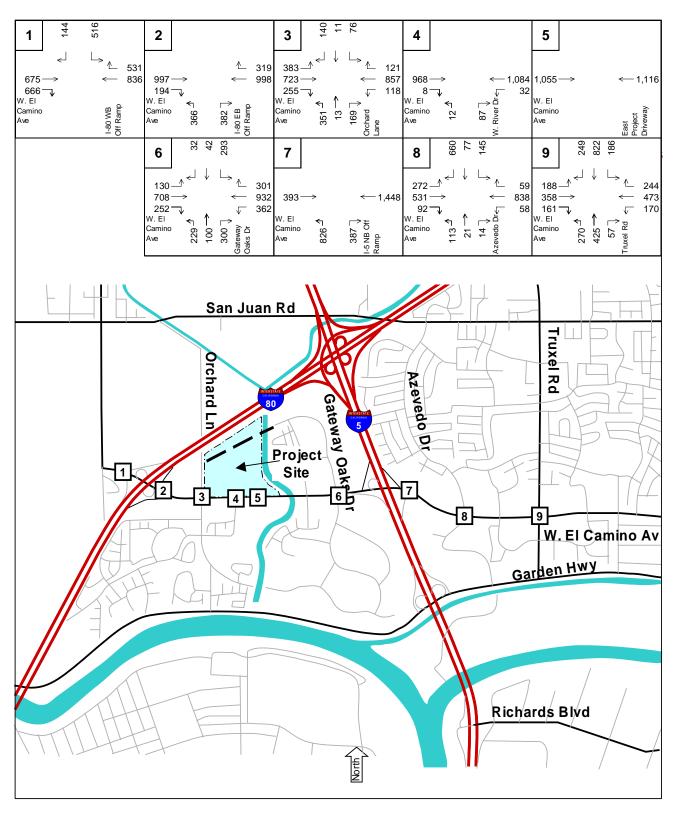


Figure 32. Cumulative No Project (with 6 lanes on West El Camino Avenue)
PM Peak Hour Traffic Volumes

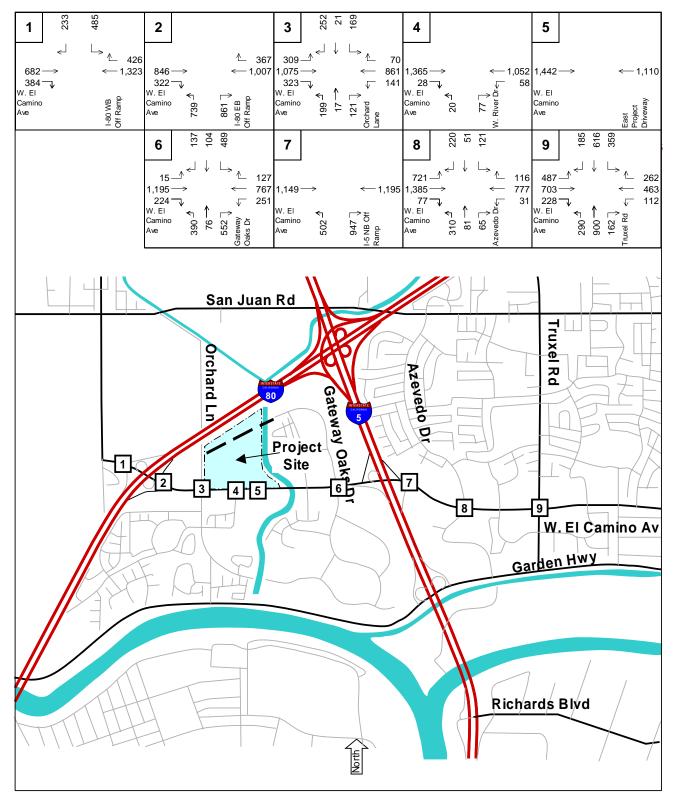


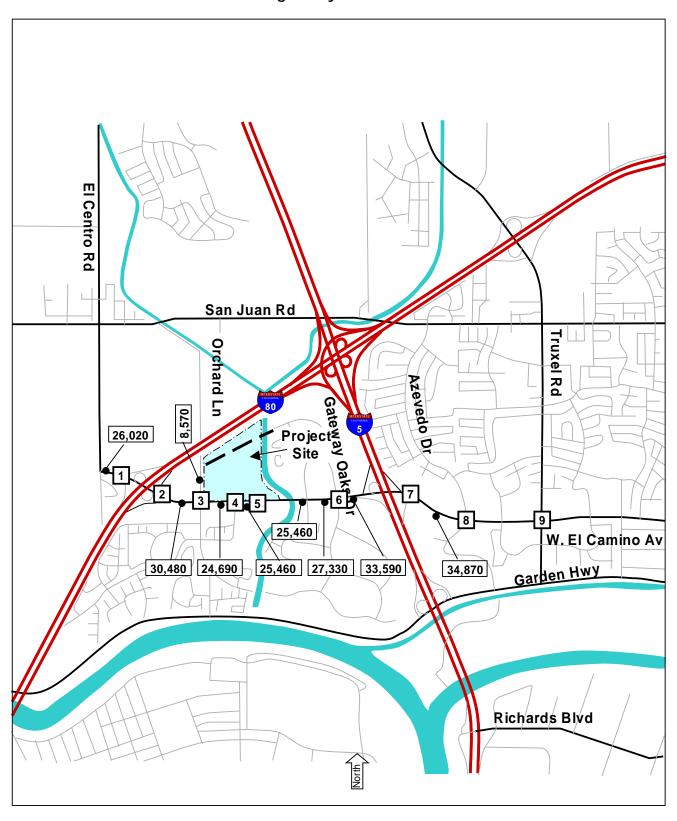
Table 35: Cumulative No Project (with 6 lanes on West El Camino Avenue)

Conditions – Street Segments

Street	Location	Number of Lanes	Avg. Weekday Traffic Volumes	LOS	V/C	
W. El Camino Ave	Between El Centro Rd and I- 80 WB ramps	6	26,020	A	0.48	
W. El Camino Ave	Between I-80 EB ramps and Orchard Ln	6	30,480	A	0.56	
W. El Camino Ave	Between Orchard Ln and River Oaks Way (Proposed)/West River Drive	6	24,690	A	0.46	
W. El Camino Ave	Between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)	6	25,460	A	0.47	
W. El Camino Ave	Between East Project Driveway (Proposed) and Grasslands Way	6	25,460	A	0.47	
W. El Camino Ave	Between Grassland Way and Gateway Oaks Dr	6	27,330	A	0.51	
W. El Camino Ave	Between Gateway Oaks Dr and I-5 SB ramps	6	33,590	В	0.62	
W. El Camino Ave	Between I-5 NB ramps and Azevedo Dr	6	34,870	В	0.65	
Orchard Ln	North of W. El Camino Ave	2	8,670	A	0.58	
NOTE: Bolded values indicate unacceptable LOS as per City standards.						

Figure 33. Cumulative No Project (with 6 lanes on West El Camino Avenue)

Average Daily Traffic Volumes



# **Freeway Off-Ramps**

Freeway Off-Ramps were analyzed to determine whether the available storage lengths are adequate for the anticipated queues. Table 33 presents the comparison of the queue length and the storage length for the Cumulative No Project (with 6 lanes on West El Camino Avenue) conditions. All three freeway off-ramps would have adequate capacity to store the anticipated queue.

Table 36: Cumulative No Project (with 6 lanes on West El Camino Avenue)

Conditions – Ramp Queuing

Location	Storage	AM Peak Hour		PM Peak Hour				
	Capacity (ft)	Queue (ft)	·		Adequate Capacity			
I-80 WB Off-ramp to W. El Camino								
SBL	1,200	475	YES	375	YES			
SBR	1,200	125	YES	175	YES			
I-80 EB Off-ramp to W. El Camino								
NBL	1,200	250	YES	350	YES			
NBR	1,000	275	YES	475	YES			
I-5 NB Off-ramp to W. El Camino	600	367	YES	375	YES			
NOTE: Bolded values indicate a queue greater than the storage capacity.								

# Cumulative Plus Project without Gateway Oaks Drive Extension Conditions – 6 lanes on West El Camino Avenue

For this scenario, West El Camino Avenue is assumed to be 6 lanes, and the Proposed Project would eliminate the Gateway Oaks Drive Extension, and therefore, Gateway Oaks Drive would not be extended north of the project site for vehicular traffic. A summary of the lane configurations and traffic controls for Cumulative Plus Project (with 6 lanes on West El Camino Avenue) with and without Gateway Oaks Drive Extension conditions is shown in Figure 34.

# Impacts (Cumulative Plus Project without Gateway Oaks Drive Extension Conditions – 6 lanes on West El Camino Avenue)

#### Intersections

Figures 35 and 36 present the AM and PM Cumulative Plus Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) traffic volumes. These volumes were used to calculate the Cumulative Plus Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) level of service at the study intersections. The results of the LOS calculation are shown in Tables 34 and 35 for AM and PM peak hours, respectively.

As seen in Tables 38 and 39, all the study area intersections are expected to operate at an acceptable LOS condition under the Cumulative Plus Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) scenario, in accordance with the City's standards of significance. The Proposed Project traffic would not create **significant impacts** at any study intersections.

Figure 34. Cumulative Plus Project (with 6 lanes on West El Camino Avenue) with & without Gateway Oaks Drive Extension - Lanes & Traffic Control

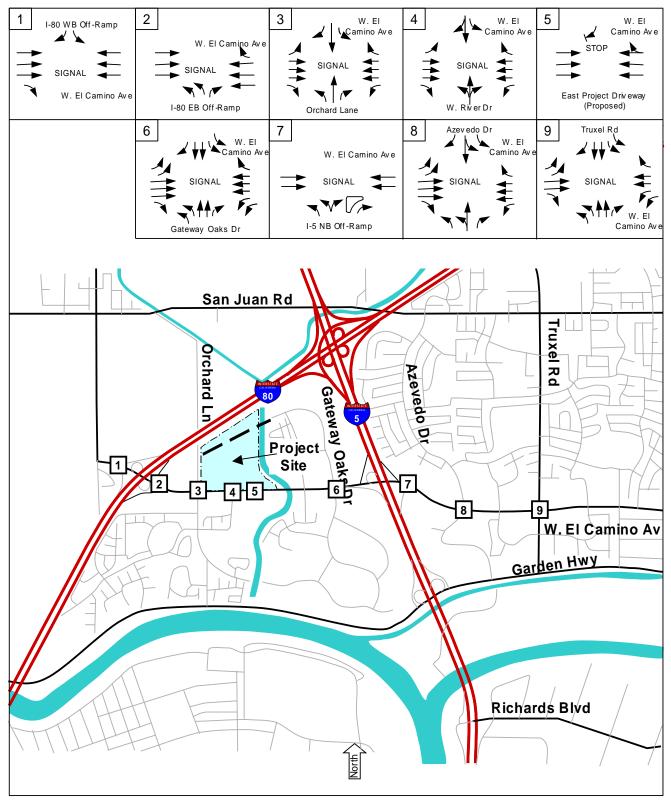


Figure 35. Cumulative Plus Project without Gateway Oaks Drive Extension (with 6 lanes on West EL Camino Avenue) AM Peak Hour Traffic Volumes

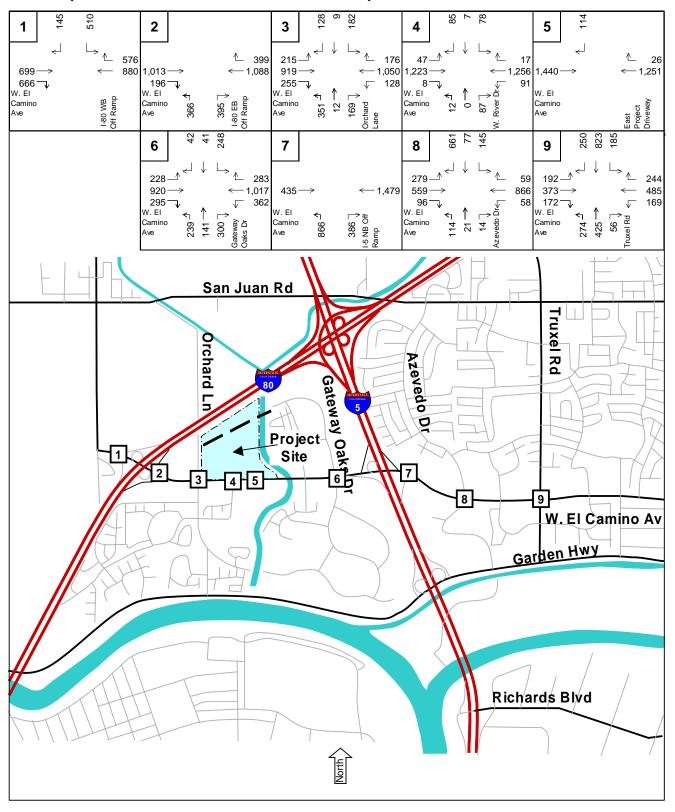


Figure 36. Cumulative Plus Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) PM Peak Hour Traffic Volumes

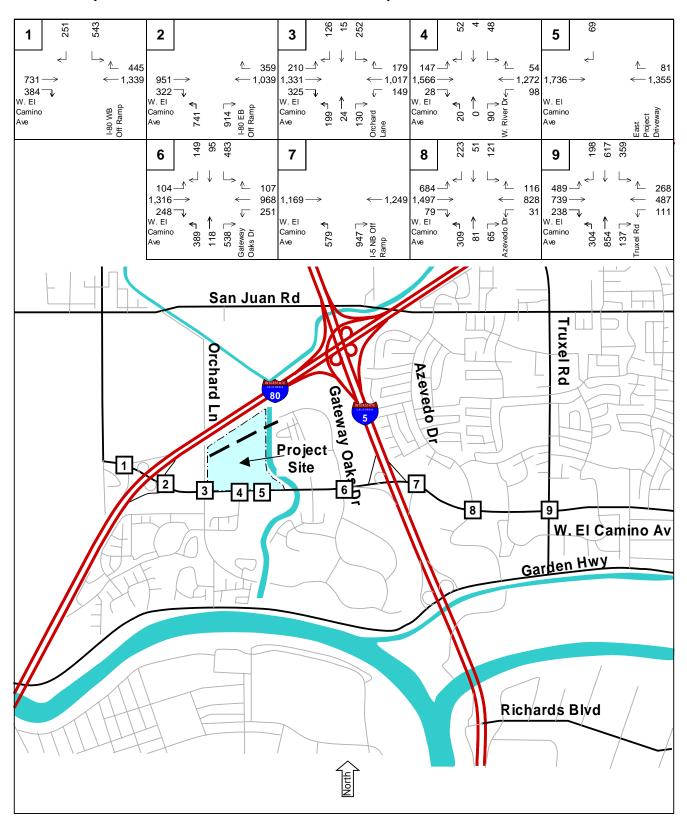


Table 37: Cumulative Conditions (with 6 lanes on West El Camino Avenue) – Intersection Operations for AM Peak Hour

Intersection	Cumulat	ive No	Project	Cumulative Plus Project without Gateway Oaks Drive Extension			
	Control	$LOS^1$	Delay <sup>2</sup>	Control	LOS1	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off- Ramp	Signal	В	17.5	Signal	В	17.4	
West El Camino Ave. / I-80 EB Off- Ramp	Signal	В	18.9	Signal	В	17.7	
West El Camino Ave. / Orchard Ln	Signal	D	35.2	Signal	C	32.8	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (B)	0.8 (14.8)	Signal	В	18.9	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (B)	0.5 (12.8)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	C	32.4	Signal	C	32.4	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	20.4	Signal	C	20.8	
West El Camino Ave. / Azevedo Dr.	Signal	D	38.1	Signal	D	38.6	
West El Camino Ave. / Truxel Rd	Signal	С	30.9	Signal	С	31.1	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Table 38: Cumulative Conditions (with 6 lanes on West El Camino Avenue) – Intersection Operations for PM Peak Hour

Intersection	Cumulat	ive No	Project	Cumulative Plus Project without Gateway Oaks Drive Extension			
	Control	LOS1	Delay <sup>2</sup>	Control	LOS1	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off- Ramp	Signal	В	18.5	Signal	C	20.0	
West El Camino Ave. / I-80 EB Off- Ramp	Signal	C	25.7	Signal	C	28.0	
West El Camino Ave. / Orchard Ln	Signal	С	33.9	Signal	C	30.3	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (D)	1.3 (32.5)	Signal	В	18.2	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (B)	0.3 (13.0)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	D	41.3	Signal	D	45.1	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	21.8	Signal	С	22.2	
West El Camino Ave. / Azevedo Dr.	Signal	С	31.3	Signal	С	31.2	
West El Camino Ave. / Truxel Rd	Signal	С	34.7	Signal	C	34.8	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

#### **Signal Warrant Analysis**

Since none of the stop sign controlled intersections would operate at LOS D or worse, signal warrant analysis was not needed per City's Traffic Impact Analysis Guidelines for the Cumulative Plus Project without Gateway Oaks Extension (with 6 lanes on West El Camino Avenue) conditions.

#### **Street Segments**

Table 36 summarizes the Cumulative Plus Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes on study street segments, and Figure 37 shows the ADT graphically.

Under the Cumulative Plus Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario, all street segments would operate at LOS C or better. The implementation of the Proposed Project would result in *no impact* to the street segments.

#### Freeway Off-Ramps

All freeway off-ramps would have adequate storage capacity for the anticipated queues. The implementation of the Proposed Project would result in *no impact* to the freeway off-ramps under the Cumulative Plus Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario. Tables 37 and 38 present the comparison of the queue length and the available storage length for the Cumulative Plus Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario for AM and PM peak hours, respectively.

Figure 37. Cumulative Plus Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) Average Daily Traffic Volumes

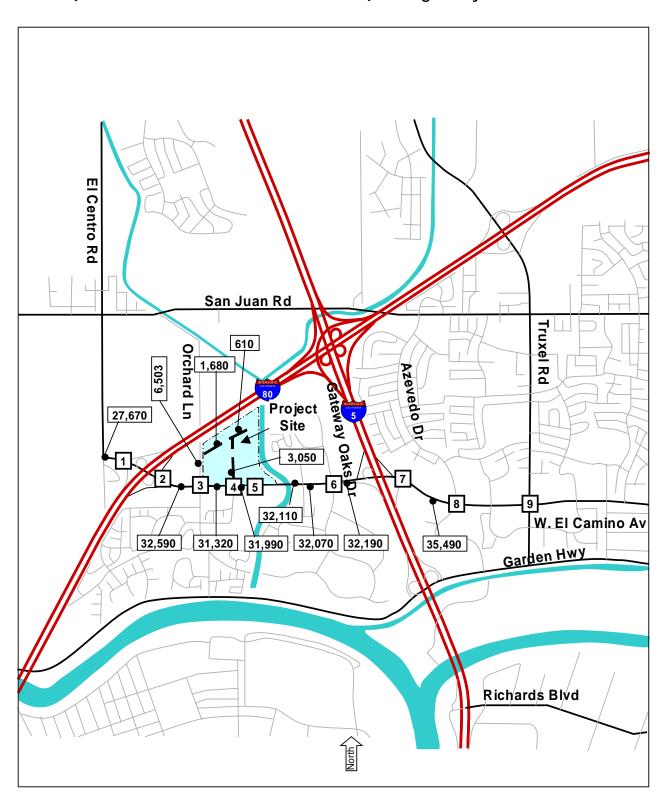


Table 39: Cumulative Conditions (with 6 lanes on West El Camino Avenue) – Street Segments

Street	Location	# of Cumulative No Project Gatew									out aks
			ADT	LOS	V/C	ADT	LOS	V/C			
W. El Camino Ave	Between El Centro Rd and I-80 WB ramps	6	26,020	A	0.48	27,670	A	0.51			
W. El Camino Ave	Between I-80 EB ramps and Orchard Ln	6	30,480	A	0.56	32,590	В	0.60			
W. El Camino Ave	Between Orchard Ln and River Oaks Way (Proposed)/West River Drive	6	24,690	A	0.46	31,320	A	0.58			
W. El Camino Ave	Between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)	6	25,460	A	0.47	31,990	A	0.59			
W. El Camino Ave	Between East Project Driveway (Proposed) and Grasslands Way	6	25,460	A	0.47	32,110	A	0.59			
W. El Camino Ave	Between Grassland Way and Gateway Oaks Dr	6	27,330	A	0.51	32,070	A	0.59			
W. El Camino Ave	Between Gateway Oaks Dr and I-5 SB ramps	6	33,590	В	0.62	32,190	В	0.69			
W. El Camino Ave	Between I-5 NB ramps and Azevedo Dr	6	34,870	В	0.65	35,490	В	0.66			

Table 40: Cumulative Conditions (with 6 lanes on West El Camino Avenue) – Street Segments (continued)

Street	Location	# of Lanes		Cumulative No Project			Cumulative Plus Project without Gateway Oaks Drive Extension		
			ADT	LOS	V/C	ADT	LOS	V/C	
Orchard Ln	North of W. El Camino Ave	2	8,670	A	0.58	6,503	A	0.55	
Riverdale Dr (Proposed)	East of Orchard Ln	2	-	-	-	1,680	A	0.11	
Riverdale Dr (Proposed)	River Oaks Way (Proposed) and East Terminal	2	-	-	-	610	A	0.04	
River Oaks Way (Proposed)	North of W. El Camino Ave	2	-	-	-	3,050	A	0.20	

NOTE: Bolded values indicate unacceptable LOS as per City standards.

Table 41: Cumulative (with 6 lanes on West El Camino Avenue) Conditions – Ramp Queuing for AM Peak Hour

Location	Storage		ulative No Project	Cumulative Plus Project without Gateway Oaks Drive Extension		
		Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity	
I-80 WB Off-ramp to W. El Camino						
SBL	1,200	475	YES	475	YES	
SBR	1,200	125	YES	125	YES	
I-80 EB Off-ramp to W. El Camino						
NBL	1,200	250	YES	275	YES	
NBR	1,000	275	YES	300	YES	
I-5 NB Off-ramp to W. El Camino	600	367	YES	375	YES	

NOTE: Bolded values indicate a queue greater than the storage capacity.

Table 42: Cumulative (with 6 lanes on West El Camino Avenue) Conditions – Ramp Queuing for PM Peak Hour

Location	Storage		ılative No roject	Cumulative Plus Project without Gateway Oaks Drive Extension			
	~	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity		
I-80 WB Off-ramp to W. El Camino							
SBL	1,200	375	YES	400	YES		
SBR	1,200	175	YES	175	YES		
I-80 EB Off-ramp to W. El Camino							
NBL	1,200	350	YES	350	YES		
NBR	1,000	475	YES	475	YES		
I-5 NB Off-ramp to W. El Camino	600	375	YES	408	YES		
NOTE: Bolded values indicate a queue greater than the storage capacity.							

#### **Bicycle System Impacts**

Development of the Proposed Project would result in an increase in bicycle trips in the study area by residents and visitors. However, the Proposed Project is not anticipated to hinder or eliminate the existing bikeways or interfere with the implementation of the planned bikeways in the study area. Moreover, the development of the Proposed Project would result in additional bikeway improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal.

As a result, the implementation of the Proposed Project would result in **no** *impact* to the bicycle system.

#### **Pedestrian System Impacts**

Development of the Proposed Project would result in an increase in pedestrian trips in the study area by residents and visitors. However, the Proposed Project is not anticipated to result in an unsafe condition for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflict. Moreover, the development of the Proposed Project would result in additional pedestrian improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal.

As a result, the implementation of the Proposed Project would result in **no** *impact* to the pedestrian system.

#### **Transit Impacts**

Development of the Proposed Project would result in an increase in demand for transit. Currently, Regional Transit District's Bus Routes 88 and 89 provide transit services in the vicinity of the Project site. The nominal transit usage generated by the Proposed Project is not anticipated to exceed the capacity of the available/planned transit system in the study area. The implementation of the Proposed Project would result in *no impact* to the transit system.

# Mitigation Measures (Cumulative Plus Project without Gateway Oaks Drive Extension Conditions – 6 lanes on West El Camino Avenue)

#### Intersection

No mitigation measures are required.

#### **Street Segments**

No mitigation measures are required.

#### **Freeway Off-Ramps**

No mitigation measures are required.

#### **Bicycle System Impacts**

No mitigation measures are required.

#### **Pedestrian System Impacts**

No mitigation measures are required.

#### **Transit Impacts**

No mitigation measures are required.

# Cumulative Plus Project with Gateway Oaks Drive Extension Conditions – 6 lanes on West El Camino Avenue

The Gateway Oaks Drive Extension to Orchard Lane is called for in the current South Natomas Community Plan (SNCP). The traffic operations under Cumulative Plus Project with Gateway Oaks Drive Extension are analyzed in order to provide a comparison with the elimination of Gateway Oaks Drive Extension scenario, which is analyzed in the previous section..

For this scenario also, West El Camino Avenue is assumed to be 6 lanes.

A summary of the lane configurations and traffic controls for Cumulative Plus Project (with 6 lanes on West El Camino Avenue) with and without Gateway Oaks Drive Extension conditions is shown in Figure 34.

# Impacts (Cumulative Plus Project with Gateway Oaks Drive Extension Conditions – 6 lanes on West El Camino Avenue)

#### Intersections

Figures 38 and 39 present the AM and PM Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) traffic volumes. These volumes were used to calculate the Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) level of service at the study intersections. The results of the LOS calculation are shown in Tables 39 and 40 for AM and PM peak hours, respectively.

As seen in Tables 39 and 40, all the study area intersections, except one as described in the following discussion, are expected to operate at an acceptable LOS condition under the Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario, in accordance with the City's standards of significance. The Proposed Project traffic would create **significant impacts** at the intersection West El Camino Avenue/Orchard Lane.

#### A) West El Camino Avenue/Orchard Lane (#3)

With the addition of the Proposed Project peak hour traffic, the LOS at the intersection of West El Camino Avenue/Orchard Lane would degrade from the Cumulative No Project LOS C to LOS D during the PM peak hour, resulting into a *significant impact* at this intersection.

Figure 38. Cumulative Plus Project with Gateway Oaks Drive Extension 6 lanes on West El Camino Avenue) AM Peak Hour Traffic Volumes

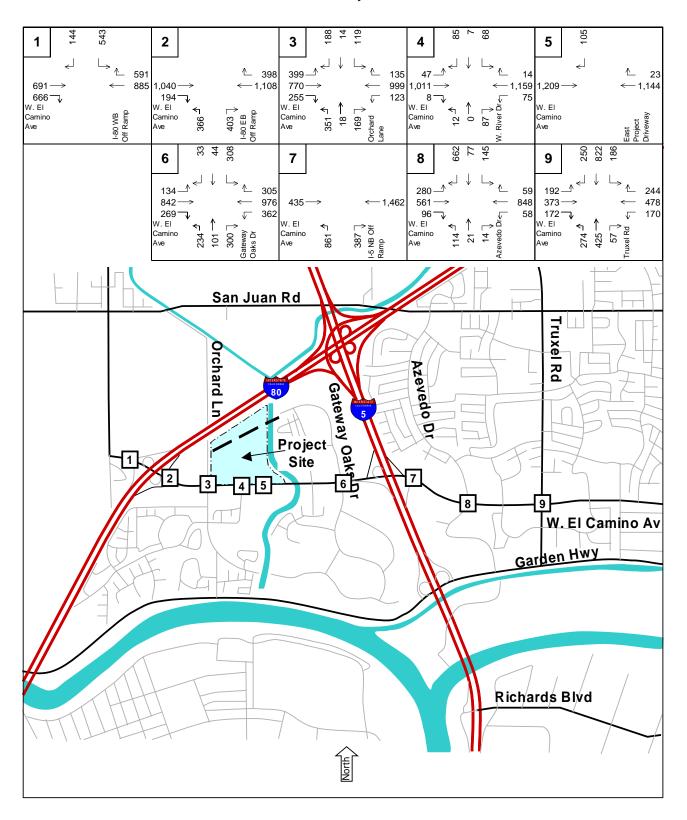


Figure 39. Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West EL Camino Avenue) PM Peak Hour Traffic Volumes

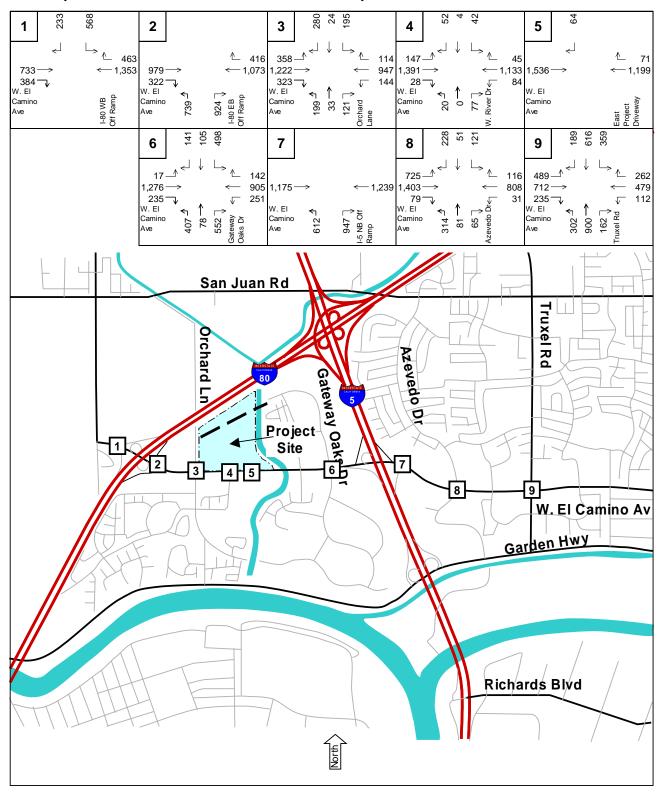


Table 43: Cumulative Conditions (with 6 lanes on West El Camino Avenue) – Intersection Operations for AM Peak Hour

Intersection	Cumulat	ive No	Project	Cumulative Plus Project with Gateway Oaks Drive Extension			
	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	Control	LOS1	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off- Ramp	Signal	В	17.5	Signal	В	18.2	
West El Camino Ave. / I-80 EB Off- Ramp	Signal	В	18.9	Signal	В	18.0	
West El Camino Ave. / Orchard Ln	Signal	D	35.2	Signal	D	38.2	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (B)	0.8 (14.8)	Signal	В	19.1	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (B)	0.5 (12.1)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	C	32.4	Signal	C	32.6	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	20.4	Signal	C	20.7	
West El Camino Ave. / Azevedo Dr.	Signal	D	38.1	Signal	D	38.4	
West El Camino Ave. / Truxel Rd	Signal	С	30.9	Signal	C	31.1	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose  $\frac{1}{2}$ 

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Table 44: Cumulative Conditions (with 6 lanes on West El Camino Avenue) – Intersection Operations for PM Peak Hour

Intersection	Cumulat	ive No	Project	Cumulative Plus Project with Gateway Oaks Drive Extension			
	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	Control	LOS <sup>1</sup>	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off- Ramp	Signal	В	18.8	Signal	C	20.5	
West El Camino Ave. / I-80 EB Off- Ramp	Signal	C	25.7	Signal	C	28.5	
West El Camino Ave. / Orchard Ln	Signal	С	33.9	Signal	D	35.1	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (D)	1.3 (32.5)	Signal	В	17.8	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (B)	0.3 (12.1)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	D	41.3	Signal	D	42.2	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	С	21.8	Signal	С	22.2	
West El Camino Ave. / Azevedo Dr.	Signal	С	31.3	Signal	С	31.6	
West El Camino Ave. / Truxel Rd	Signal	С	34.7	Signal	C	34.8	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose

 $<sup>^{2}</sup>$  Weighted average control delay in seconds

#### **Signal Warrant Analysis**

Since none of the stop sign controlled intersections would operate at LOS D or worse, signal warrant analysis was not needed per City's Traffic Impact Analysis Guidelines for the Cumulative Plus Project with Gateway Oaks Extension (with 6 lanes on West El Camino Avenue) conditions.

#### **Street Segments**

Table 42 summarizes the Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes on study street segments, and Figure 41 shows the ADT graphically.

Under the Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario, all street segments would operate at LOS C or better. The implementation of the Proposed Project would result in *no impact* to the street segments.

#### Freeway Off-Ramps

All freeway off-ramps would have adequate storage capacity for the anticipated queues. The implementation of the Proposed Project would result in *no impact* to the freeway off-ramps under the Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario. Tables 43 and 44 present the comparison of the queue length and the available storage length for the Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario for AM and PM peak hours, respectively.

Table 45: Cumulative Conditions (with 6 lanes on West El Camino Avenue) – Street Segments

Street	Location	# of Lanes		ulative Project		Cumulative Plus Project with Gateway Oaks Drive Extension			
			ADT	LOS	V/C	ADT	LOS	V/C	
W. El Camino Ave	Between El Centro Rd and I-80 WB ramps	6	26,020	A	0.48	28,010	A	0.52	
W. El Camino Ave	Between I-80 EB ramps and Orchard Ln	6	30,480	A	0.56	33,580	В	0.62	
W. El Camino Ave	Between Orchard Ln and River Oaks Way (Proposed)/West River Drive	6	24,690	A	0.46	27,750	A	0.51	
W. El Camino Ave	Between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)	6	25,460	A	0.47	27,930	A	0.52	
W. El Camino Ave	Between East Project Driveway (Proposed) and Grasslands Way	6	25,460	A	0.47	28,000	A	0.52	
W. El Camino Ave	Between Grassland Way and Gateway Oaks Dr	6	27,330	A	0.51	29,860	A	0.55	
W. El Camino Ave	Between Gateway Oaks Dr and I-5 SB ramps	6	33,590	В	0.62	36,020	В	0.67	
W. El Camino Ave	Between I-5 NB ramps and Azevedo Dr	6	34,870	В	0.65	35,540	В	0.66	

Table 46: Cumulative Conditions (with 6 lanes on West El Camino Avenue) – Street Segments (continued)

Street	Location	# of Lanes	Cumulative No Project			Proj Gate	lative l ect wit way Oa Extens	th aks
			ADT	LOS	V/C	ADT	LOS	V/C
Orchard Ln	North of W. El Camino Ave	2	8,670	A	0.58	10,330	В	0.69
Riverdale Dr (Proposed)	East of Orchard Ln	2	-	-	-	7,290	A	0.49
Riverdale Dr (Proposed)	Between River Oaks Way (Proposed) and East Terminal	2	-	-	-	6,334	A	0.42
River Oaks Way (Proposed)	North of W. El Camino Ave	2	-	-	-	2,900	A	0.19

NOTE: Bolded values indicate unacceptable LOS as per City standards.

Figure 40. Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) Average Daily Traffic Volumes

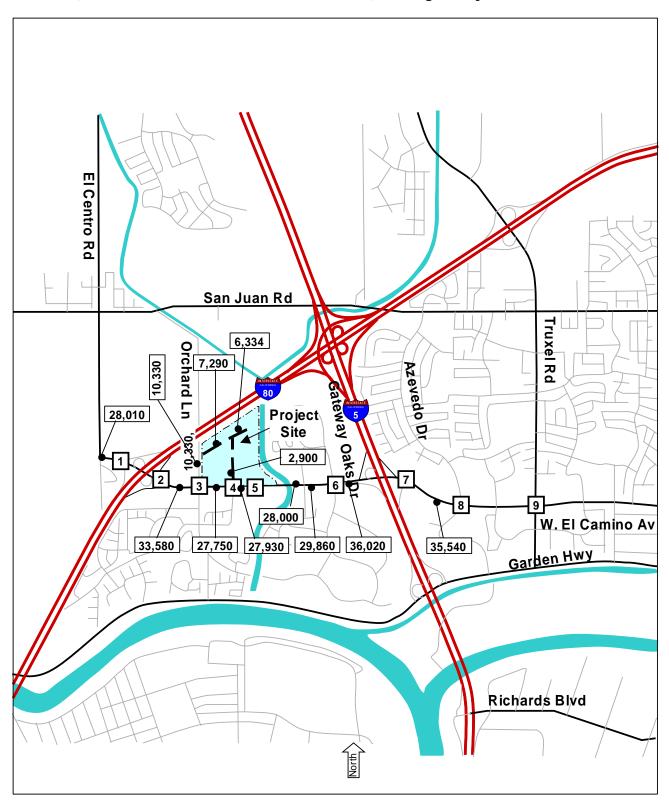


Table 47: Cumulative (with 6 lanes on West El Camino Avenue) Conditions – Ramp Queuing for AM Peak Hour

Location	Storage		ulative No roject	Cumulative Plus Project with Gateway Oaks Drive Extension				
	~ •	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity			
I-80 WB Off-ramp to W. El Camino								
SBL	1,200	475	YES	400	YES			
SBR	1,200	125	YES	75	YES			
I-80 EB Off-ramp to W. El Camino								
NBL	1,200	250	YES	275	YES			
NBR	1,000	275	YES	300	YES			
I-5 NB Off-ramp to W. El Camino	600	367	YES	375	YES			
NOTE: Bolded values indicate a queue greater than the storage capacity.								

Table 48: Cumulative (with 6 lanes on West El Camino Avenue) Conditions – Ramp Queuing for PM Peak Hour

Location	Storage		ılative No roject	Cumulative Plus Project with Gateway Oaks Drive Extension					
	Capacity (ft)	Queue (ft)	Adequate Capacity	Queue (ft)	Adequate Capacity				
I-80 WB Off-ramp to W. El Camino									
SBL	1,200	375	YES	425	YES				
SBR	1,200	175	YES	150	YES				
I-80 EB Off-ramp to W. El Camino									
NBL	1,200	350	YES	375	YES				
NBR	1,000	475	YES	525	YES				
I-5 NB Off-ramp to W. El Camino	600	375	YES	408	YES				
NOTE: Bolded values indicate a queue greater than the storage capacity.									

#### **Bicycle System Impacts**

Development of the Proposed Project would result in an increase in bicycle trips in the study area by residents and visitors. However, the Proposed Project is not anticipated to hinder or eliminate the existing bikeways or interfere with the implementation of the planned bikeways in the study area. Moreover, the development of the Proposed Project would result in additional bikeway improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal.

As a result, the implementation of the Proposed Project would result in **no** *impact* to the bicycle system.

#### **Pedestrian System Impacts**

Development of the Proposed Project would result in an increase in pedestrian trips in the study area by residents and visitors. However, the Proposed Project is not anticipated to result in an unsafe condition for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflict. Moreover, the development of the Proposed Project would result in additional pedestrian improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal.

As a result, the implementation of the Proposed Project would result in **no** *impact* to the pedestrian system.

#### **Transit Impacts**

Development of the Proposed Project would result in an increase in demand for transit. Currently, Regional Transit District's Bus Routes 88 and 89 provide transit services in the vicinity of the Project site. The nominal transit usage generated by the Proposed Project is not anticipated to exceed the capacity of the available/planned transit system in the study area. The implementation of the Proposed Project would result in *no impact* to the transit system.

## Mitigation Measures (Cumulative Plus Project with Gateway Oaks Drive Extension Conditions – 6 lanes on West El Camino Avenue)

#### Intersection

The necessary mitigation measures required to offset the significant traffic impacts at study intersection are discussed below:

A) West El Camino Avenue/Orchard Lane (#3)

Reconfigure the northbound and southbound approaches from one left turn lane, one thru lane, and one right turn lane to one left turn lane, one shared left-through lane, and one right turn lane. Change the signal phasing for the northbound/southbound approach from protected phasing to split phasing. This mitigation measure would reduce the delay to less than 5 seconds compared to the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions during the AM peak hour. During the PM peak hour, this mitigation measure would improve the level of service from LOS D to LOS C. The impact after mitigation would be *less-than significant*.

This mitigation is also recommended under the Cumulative Plus Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions.

Figure 41 illustrates the effects of the mitigation measures on traffic operations for the Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) conditions. Table 44 shows the LOS and delay with and without mitigations for the impacted intersection.

Table 49: Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) Conditions – Summary of Mitigation Measures for Impacted Intersections

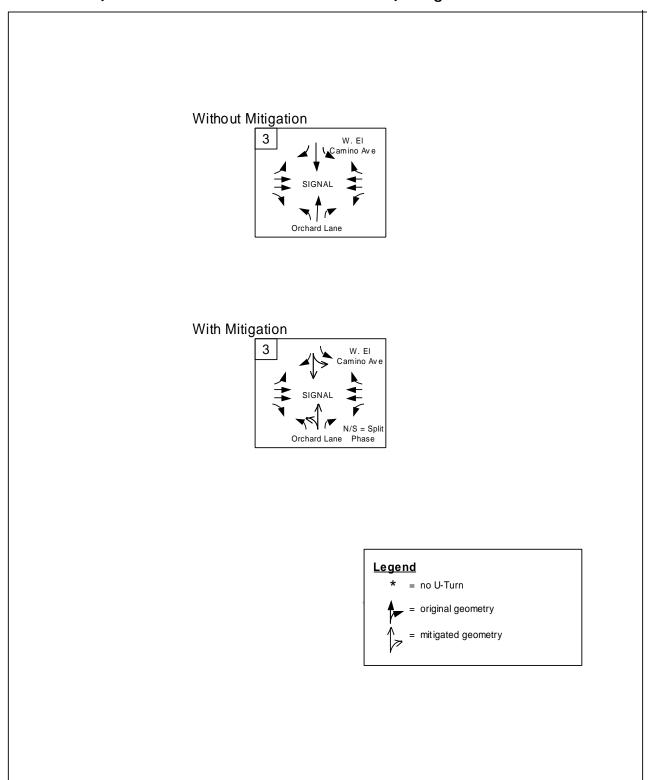
Intersection	Withou	ıt Mitig	gation	With Mitigation				
	Control	LOS1	Delay <sup>2</sup>	Control	LOS1	Delay <sup>2</sup>		
AM Peak Hour								
West El Camino Ave. / Orchard Lane	Signal	D	38.2	Signal	С	33.9		
PM Peak Hour								
West El Camino Ave. / Orchard Lane	Signal	D	35.1	Signal	C	32.6		

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

NOTE: Bolded values indicate non-compliance with City standards.

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Figure 41. Cumulative Plus Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) Mitigation Measures



#### **Street Segments**

No mitigation measures are required.

### Freeway Off-Ramps

No mitigation measures are required.

### **Bicycle System Impacts**

No mitigation measures are required.

## **Pedestrian System Impacts**

No mitigation measures are required.

#### **Transit Impacts**

No mitigation measures are required.

# **Effects of Proposed Community Plan Amendments**

The City's South Natomas Community Plan (SNCP) calls for providing a new loop road connecting Orchard Lane and Gateway Oaks Drive north of West El Camino Avenue (extension of Gateway Oaks Drive). The loop road alignment runs from the current terminus of Orchard Lane just north of West El Camino Avenue easterly across from the proposed River Oaks project site to the current terminus of Gateway Oaks Drive located just east of Natomas East Main Drainage Canal. The proposed extension of Gateway Oaks Drive would require construction of a bridge across Natomas Main Drainage Canal to complete the loop road.

The River Oaks project proposes to create the loop road as described above. However, the River Oaks project proposes to construct a bike and pedestrian only bridge in place of the bridge for automobile traffic across Natomas Main Drainage Canal, and thus eliminate the extension of Gateway Oaks Drive for vehicular circulation across the canal. This would in turn eliminate the vehicular circulation along the proposed new loop road between Gateway Oaks Drive and Orchard Lane as proposed in the SNCP.

The impact of this proposed change to the SNCP was evaluated and reported in terms of anticipated traffic volumes on the street system within the project site and on major roadways, and intersection levels of service within the study area. The results of traffic impacts analysis with and without Gateway Oaks Drive extension are summarized in Tables 45 through 50.

The effects of the proposed amendment to SNCP are summarized below in terms of impacts to additional roadway facility under plus project conditions with elimination of Gateway Oaks Drive Extension scenario compared to with Gateway Oaks Drive Extension scenario.

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Table 50: Cumulative Conditions (with 4 lanes on West EL Camino Avenue) – Intersection Operations for AM Peak Hour

Intersection		Cumulative No Project			ve Plus Proje Oaks Drive		Cumulative Plus Project with Gateway Oaks Drive Extension			
	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	Control	$\mathbf{LOS}^1$	Delay <sup>2</sup>	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off-Ramp	Signal	В	18.1	Signal	В	18.0	Signal	В	18.8	
West El Camino Ave. / I-80 EB Off-Ramp	Signal	В	17.5	Signal	В	17.7	Signal	В	17.8	
West El Camino Ave. / Orchard Ln	Signal	D	36.8	Signal	C	33.2	Signal	D	42.8	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (C)	1.0 (18.4)	Signal	В	18.3	Signal	В	17.4	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (C)	0.7 (16.1)	Stop Sign	A (B)	0.6 (14.8)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	C	32.0	Signal	C	31.9	Signal	C	32.2	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	C	20.2	Signal	C	20.6	Signal	C	20.5	
West El Camino Ave. / Azevedo Dr.	Signal	D	43.6	Signal	D	43.9	Signal	D	44.4	
West El Camino Ave. / Truxel Rd	Signal	С	30.7	Signal	С	30.7	Signal	С	30.8	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose

<sup>&</sup>lt;sup>2</sup> Weighted average control delay in seconds

Table 51: Cumulative Conditions (with 4 lanes on West EL Camino Avenue) – Intersection Operations for PM Peak Hour

Intersection		Cumulative No Project			e Plus Proje Oaks Drive		Cumulative Plus Project with Gateway Oaks Drive Extension			
	Control	$\mathbf{LOS}_{1}$	Delay <sup>2</sup>	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off-Ramp	Signal	В	17.7	Signal	В	19.2	Signal	В	19.8	
West El Camino Ave. / I-80 EB Off-Ramp	Signal	C	27.2	Signal	C	30.8	Signal	C	32.2	
West El Camino Ave. / Orchard Ln	Signal	C	34.8	Signal	C	30.8	Signal	D	37.7	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (E)	1.7 (46.2)	Signal	В	19.8	Signal	В	18.5	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (C)	0.4 (16.9)	Stop Sign	A (B)	0.3 (14.7)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	D	41.3	Signal	D	47.2	Signal	D	42.8	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	C	21.8	Signal	C	22.1	Signal	C	22.1	
West El Camino Ave. / Azevedo Dr.	Signal	C	31.6	Signal	C	31.5	Signal	С	32.8	
West El Camino Ave. / Truxel Rd	Signal	С	34.7	Signal	С	34.8	Signal	С	34.8	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose

 $<sup>^2</sup>$  Weighted average control delay in seconds

Table 52: Cumulative Conditions (with 6 lanes on West EL Camino Avenue) – Intersection Operations for AM Peak Hour

Intersection		Cumulative No Project			e Plus Proje Oaks Drive		Cumulative Plus Project with Gateway Oaks Drive Extension			
	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off-Ramp	Signal	В	17.5	Signal	В	17.4	Signal	В	18.2	
West El Camino Ave. / I-80 EB Off-Ramp	Signal	В	18.9	Signal	В	17.7	Signal	В	18.0	
West El Camino Ave. / Orchard Ln	Signal	D	35.2	Signal	C	32.8	Signal	D	38.2	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (B)	0.8 (14.8)	Signal	В	18.9	Signal	В	19.1	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (B)	0.5 (12.8)	Stop Sign	A (B)	0.5 (12.1)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	C	32.4	Signal	C	32.4	Signal	C	32.6	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	C	20.4	Signal	C	20.8	Signal	C	20.7	
West El Camino Ave. / Azevedo Dr.	Signal	D	38.1	Signal	D	38.6	Signal	D	38.4	
West El Camino Ave. / Truxel Rd	Signal	С	30.9	Signal	C	31.1	Signal	C	31.1	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose

 $<sup>^2</sup>$  Weighted average control delay in seconds

Table 53: Cumulative Conditions (with 6 lanes on West EL Camino Avenue) – Intersection Operations for PM Peak Hour

Intersection		Cumulative No Project			e Plus Proje Oaks Drive		Cumulative Plus Project with Gateway Oaks Drive Extension			
	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	Control	$\mathbf{LOS}_1$	Delay <sup>2</sup>	
West El Camino Ave. / I-80 WB Off-Ramp	Signal	В	18.5	Signal	C	20.0	Signal	C	20.5	
West El Camino Ave. / I-80 EB Off-Ramp	Signal	C	25.7	Signal	C	28.0	Signal	C	28.5	
West El Camino Ave. / Orchard Ln	Signal	C	33.9	Signal	C	30.3	Signal	D	35.1	
West El Camino Ave. / River Oaks Wy (Proposed)/West River Dr.	Stop Sign	A (D)	1.3 (32.5)	Signal	В	18.2	Signal	В	17.8	
West El Camino Ave. / East Project Driveway	Stop Sign	N/A	N/A	Stop Sign	A (B)	0.3 (13.0)	Stop Sign	A (B)	0.3 (12.1)	
West El Camino Ave. / Gateway Oaks Dr.	Signal	D	41.3	Signal	D	45.1	Signal	D	42.2	
West El Camino Ave. / I-5 NB Off-Ramp	Signal	C	21.8	Signal	C	22.2	Signal	C	22.2	
West El Camino Ave. / Azevedo Dr.	Signal	C	31.3	Signal	C	31.2	Signal	C	31.6	
West El Camino Ave. / Truxel Rd	Signal	С	34.7	Signal	С	34.8	Signal	С	34.8	

<sup>&</sup>lt;sup>1</sup> LOS = Level of Service

Bolded values indicate unacceptable LOS as per City standards.

For Stop Sign controlled intersections, the values in parenthesis represent the LOS and Delay for the worst-case movement, for information purpose

 $<sup>^2</sup>$  Weighted average control delay in seconds

Table 54: Cumulative Conditions (with 4 lanes on West El Camino Avenue) – Street Segments

Street	Location	# of Lanes	Cumulative No Project			Cumulative Plus Project without Gateway Oaks Drive Extension			Cumulative Plus Project with Gateway Oaks Drive Extension		
			ADT	LOS	V/C	ADT	LOS	V/C	ADT	LOS	V/C
W. El Camino Ave	Between El Centro Rd and I-80 WB ramps	4	25,580	С	0.71	27,300	C	0.76	27,570	С	0.77
W. El Camino Ave	Between I-80 EB ramps and Orchard Ln	4	29,760	D	0.83	32,000	D	0.89	32,860	E	0.91
W. El Camino Ave	Between Orchard Ln and River Oaks Way (Proposed)/West River Drive	4	24,070	В	0.67	30,790	D	0.86	27,130	С	0.75
W. El Camino Ave	Between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)	4	24,840	В	0.69	31,440	D	0.87	27,310	С	0.76
W. El Camino Ave	Between East Project Driveway (Proposed) and Grasslands Way	4	24,840	В	0.69	31,560	D	0.88	27,380	С	0.76
W. El Camino Ave	Between Grassland Way and Gateway Oaks Dr	4	26,730	С	0.74	31,530	D	0.88	29,260	D	0.81
W. El Camino Ave	Between Gateway Oaks Dr and I-5 SB ramps	5	33,000	C	0.73	36,750	D	0.82	35,430	С	0.79
W. El Camino Ave	Between I-5 NB ramps and Azevedo Dr	5	34,300	С	0.76	34,800	C	0.77	34,970	С	0.78
Orchard Ln	North of W. El Camino Ave	2	8,570	A	0.57	6,503	A	0.55	10,230	В	0.68
Riverdale Dr (Proposed)	East of Orchard Ln	2	-	-	-	1,680	A	0.11	7,190	A	0.48
Riverdale Dr (Proposed)	Between River Oaks Way (Proposed) and East Terminal	2	-	-	-	610	A	0.04	6,234	A	0.42
River Oaks Way (Proposed)	North of W. El Camino Ave	2	-	-	-	3,050	A	0.20	2,900	A	0.19

NOTE: Bolded values indicate unacceptable LOS as per City standards.

Table 55: Cumulative Conditions (with 6 lanes on West El Camino Avenue) – Street Segments

Street	Location	# of Lanes	Cumulative No Project			Cumulative Plus Project without Gateway Oaks Drive Extension			Cumulative Plus Project with Gateway Oaks Drive Extension		
			ADT	LOS	V/C	ADT	LOS	V/C	ADT	LOS	V/C
W. El Camino Ave	Between El Centro Rd and I-80 WB ramps	6	26,020	A	0.48	27,670	A	0.51	28,010	A	0.52
W. El Camino Ave	Between I-80 EB ramps and Orchard Ln	6	30,480	A	0.56	32,590	В	0.60	33,580	В	0.62
W. El Camino Ave	Between Orchard Ln and River Oaks Way (Proposed)/West River Drive	6	24,690	A	0.46	31,320	A	0.58	27,750	A	0.51
W. El Camino Ave	Between River Oaks Way (Proposed)/West River Drive and East Project Driveway (Proposed)	6	25,460	A	0.47	31,990	A	0.59	27,930	A	0.52
W. El Camino Ave	Between East Project Driveway (Proposed) and Grasslands Way	6	25,460	A	0.47	32,110	A	0.59	28,000	A	0.52
W. El Camino Ave	Between Grassland Way and Gateway Oaks Dr	6	27,330	A	0.51	32,070	A	0.59	29,860	A	0.55
W. El Camino Ave	Between Gateway Oaks Dr and I-5 SB ramps	6	33,590	В	0.62	32,190	В	0.69	36,020	В	0.67
W. El Camino Ave	Between I-5 NB ramps and Azevedo Dr	6	34,870	В	0.65	35,490	В	0.66	35,540	В	0.66
Orchard Ln	North of W. El Camino Ave	2	8,670	A	0.58	6,503	A	0.55	10,330	В	0.69
Riverdale Dr (Proposed)	East of Orchard Ln	2	-	-	-	1,680	A	0.11	7,290	A	0.49
Riverdale Dr (Proposed)	Between River Oaks Way (Proposed) and East Terminal	2	-	-	-	610	A	0.04	6,334	A	0.42
River Oaks Way (Proposed)	North of W. El Camino Ave	2	-	-	-	3,050	A	0.20	2,900	A	0.19

NOTE: Bolded values indicate unacceptable LOS as per City standards.

# Cumulative Plus Project Conditions – 4 lanes on West El Camino Avenue

The effects of eliminating Gateway Oaks Drive Extension under Cumulative conditions (with 4 lanes on West El Camino Avenue) are summarized in the following sections and Tables 45, 46 and 49.

#### **Intersections**

One additional intersection, as described below, would operate at unacceptable levels of service (significant impact) by eliminating the Gateway Oaks Drive Extension (see Tables 45 and 46). It may be noted that the impact at the subject intersection would be reduced to less than significant level after incorporating the mitigation (see page 79).

• West El Camino Avenue / Gateway Oaks Drive – the delay at this intersection would be increased by more than 5 seconds and exacerbate the LOS D conditions (resulting in a significant impact) during the PM peak hour without the extension, whereas the impact to this intersection would be less than significant with the extension.

Eliminating the extension of Gateway Oaks Drive would avoid the significant impact at the following intersection that would occur due to the Gateway Oaks Drive extension; this impact would also be reduced to less than significant level after incorporating the mitigation.

• West El Camino Avenue / Orchard Lane – the delay at this intersection would be increased by more than 5 seconds and exacerbate the LOS D conditions during the AM peak hour (significant impact) with the extension, whereas this intersection would operate at LOS C (acceptable condition) without the extension. During the PM peak hour, the LOS would degrade from LOS C to D with the extension (significant impact), whereas the intersection would operate at LOS C (acceptable condition) without the extension.

In view of the above and in context of City's standards of significance, overall, the intersection operations after mitigations would not be significantly different under the two scenarios, i.e. with and without Gateway Oaks Drive Extension.

#### **Street Segments**

West El Camino Avenue: Without the Gateway Oaks Drive extension, the average daily traffic (ADT) on West El Camino Avenue between Orchard Lane and Gateway Oaks Drive would increase by approximately 10% compared to the scenario with the Gateway Oaks Drive Extension (see Table 49). This change in volume is due to rerouting of traffic from sites north of West El Camino Avenue, where some of the traffic would use the extension rather than staying on West El Camino Avenue.

The following four additional street segments would operate at LOS D due to elimination of the Gateway Oaks Drive Extension; this is a significant impact and represents an unacceptable condition as per City's standards of significance. All of these four segments would operate at LOS C (less than significant impact) under Gateway Oaks Drive Extension scenario.

- West El Camino Avenue between Orchard Lane and River Oaks Way (Proposed) / West River Drive
- West El Camino Avenue between River Oaks Way (Proposed) / West River Drive and East Project Driveway
- West El Camino Avenue between East Project Driveway and Grasslands Way
- West El Camino Avenue between Gateway Oaks Drive and I-5 SB Ramps

Streets within River Oaks site: Under the Cumulative Plus Project (with 4 lanes on West El Camino Avenue) scenario, the estimated average daily volumes on Orchard Lane north of West El Camino Avenue (adjacent to western boundary of project site), and Riverdale Drive (Proposed) would be significantly higher under the Extension of Gateway Oaks Drive scenario. As shown in Table 49, the increase in volumes would range from 1.5 to 10 times on these segments with extension of Gateway Oaks Drive. According to the criteria in the City of Sacramento Street Design Guidelines (revised in February 2004), the streets within the River Oaks site are classified as follows:

- Orchard Lane north of west El Camino Avenue: classified as minor collector under the Without Gateway Oaks Drive Extension scenario, and as major collector under the With Gateway Oaks Drive Extension scenario.
- Riverdale Drive (Proposed) east of Orchard Lane: classified as local residential street under the Without Gateway Oaks Drive Extension scenario, and as major collector under the With Gateway Oaks Drive Extension scenario.
- Riverdale Drive (Proposed) between River Oaks Way (Proposed) and East Terminal: classified as local residential street under the Without Gateway Oaks Drive Extension scenario, and as minor collector under the With Gateway Oaks Drive Extension scenario.
- River Oaks Way (Proposed) north of West El Camino Avenue: classified as local residential street under both the With and Without Gateway Oaks Drive Extension scenario.

In context of the daily volumes on street segments, the elimination of Gateway Oaks Drive extension would have significant impacts on four segments of West El Camino Avenue as mentioned above. The extension of Gateway Oaks Drive would increase the volumes on the residential street segments within and adjacent (proposed Riverdale Drive and Orchard Lane) to the proposed River Oaks project. The significant increase in volumes on these residential streets would trigger the need to elevate the functional classification of the said streets. Some of the segments that would have adequate capacity to serve the demands as residential street without the Gateway Oaks Drive Extension would need to be built as collectors due to the extension.

# Cumulative Plus Project Conditions – 6 lanes on West El Camino Avenue

Under the Cumulative Plus Project (with 6 lanes on West El Camino Avenue) scenario, the effects of eliminating the Gateway Oaks Drive Extension are as described in the following sections and are summarized in Tables 47, 48 and 50.

#### Intersections

Eliminating the extension of Gateway Oaks Drive would avoid the significant impact at the following intersection that would occur due to the Gateway Oaks Drive extension; this impact would also be reduced to less than significant level after incorporating the mitigation (see page 128).

 West El Camino Avenue / Orchard Lane – the LOS at this intersection would degrade from LOS C to D (resulting in a significant impact) during the PM peak hour with the extension, whereas the impact to this intersection would be less than significant without the extension.

As shown in Tables 47 and 48 and in context of City's standards of significance, overall, the intersection operations after mitigations would not be significantly different under the two scenarios, i.e. with and without Gateway Oaks Drive Extension.

#### **Street Segments**

West El Camino Avenue: Without the Gateway Oaks Drive extension, the average daily traffic (ADT) on West El Camino Avenue between Orchard Lane and Gateway Oaks Drive would increase by approximately 10% compared to the scenario with the Gateway Oaks Drive Extension (see Table 50). This change in volume is due to rerouting of traffic from sites north of West El Camino Avenue, where some of the traffic would use the extension rather than staying on West El Camino Avenue.

No street segments on West El Camino Avenue would operate at unacceptable LOS by eliminating the Gateway Oaks Drive Extension.

Streets within River Oaks site: Under the Cumulative Plus Project (with 6 lanes on West El Camino Avenue) scenario, the estimated average daily volumes on Orchard Lane north of West El Camino Avenue (adjacent to western boundary of project site), and Riverdale Drive (Proposed) would be significantly higher under the Extension of Gateway Oaks Drive scenario. As shown in Table 50, the increase in volumes would range from 1.5 to 10 times on these segments with extension of Gateway Oaks Drive. According to the criteria in the City of Sacramento Street Design Guidelines (revised in February 2004), the streets within the River Oaks site are classified as follows:

- Orchard Lane north of west El Camino Avenue: classified as minor collector under the Without Gateway Oaks Drive Extension scenario, and as major collector under the With Gateway Oaks Drive Extension scenario.
- Riverdale Drive (Proposed) east of Orchard Lane: classified as local residential street under the Without Gateway Oaks Drive Extension scenario, and as major collector under the With Gateway Oaks Drive Extension scenario.
- Riverdale Drive (Proposed) between River Oaks Way (Proposed) and East Terminal: classified as local residential street under the Without Gateway Oaks Drive Extension scenario, and as minor collector under the With Gateway Oaks Drive Extension scenario.
- River Oaks Way (Proposed) north of West El Camino Avenue: classified as local residential street under both the With and Without Gateway Oaks Drive Extension scenario.

In context of the daily volumes on street segments, all the segments of West El Camino Avenue would operate at acceptable conditions under both scenarios (with and without Gateway Oaks Drive extension) with 6-lanes on West El Camino. The extension of Gateway Oaks Drive would significantly increase the volumes on the street segments within and adjacent (proposed Riverdale Drive and Orchard Lane) to the proposed River Oaks project. The significant increase in volumes on these residential streets would trigger the need to elevate the functional classification of the said streets. Some of the segments that would have adequate capacity to serve the demands as residential streets without the extension of Gateway Oaks Drive would need to be built as collectors due to the extension.

### Summary

In addition to a typical traffic impact analysis of the proposed project, this study provides an evaluation of potential impacts of eliminating the extension of Gateway Oaks Drive that is stipulated in City's South Natomas Community Plan. The overview of the effect of this change in the Community Plan is briefly summarized below.

#### **Cumulative Conditions with 4-lane on West El Camino Avenue**

The following would be the effects of eliminating Gateway Oaks Drive under this scenario:

- 1. Overall, the intersection operations after mitigations would not be significantly different under the two scenarios, i.e. with and without Gateway Oaks Drive Extension.
- 2. Four additional segments on West El Camino Avenue between I-80 and I-5 SB Ramps would have significant impact due to elimination of the extension of Gateway Oaks Drive, whereas these segments would operate at acceptable conditions with the extension.
- 3. The extension of Gateway Oaks Drive would significantly increase the volumes on the residential streets within and adjacent to the proposed River Oaks project (proposed Riverdale Drive and Orchard Lane) due to the rerouting of the trips from West El Camino Avenue. The significant increase in volumes on these residential streets would trigger the need to elevate the functional classification of the said streets. Some of the segments that would have adequate capacity to serve the demands as residential streets without the Gateway Oaks Drive Extension would need to be built as collectors due to the extension.

#### Cumulative Conditions with 6-lane on West El Camino Avenue

The following would be the effects of eliminating Gateway Oaks Drive under this scenario:

- 1. No additional intersection would operate at unacceptable condition in comparison to the Gateway Oaks Drive Extension scenario.
- 2. No street segments would operate at unacceptable LOS by eliminating the Gateway Oaks Drive Extension.
- 3. The extension of Gateway Oaks Drive would significantly increase the volumes on the streets within and adjacent to the proposed River Oaks project (proposed Riverdale Drive and Orchard Lane) due to the rerouting of the trips from West El Camino Avenue. The significant increase in volumes on these residential streets would trigger the need to elevate the functional classification of the said streets. Some of the segments that would have adequate capacity to serve the demands as residential streets without the Gateway Oaks Drive Extension would need to be built as collectors due to the extension.

The summary of the analysis results indicate that eliminating Gateway Oaks Drive extension would not result in any significant differences in intersection operations within the study area in comparison to the Gateway Oaks Drive with Extension condition. In regards to traffic volumes on the street system, eliminating the extension would create significant impacts on additional segments on West El Camino Avenue under the 4-lane scenario. It would,

however, result into significantly lower volumes on the residential and collector streets within and adjacent to the proposed residential subdivision for both 4-lane and 6-lane West El Camino Avenue scenarios.

In conclusion, the decision regarding the elimination of Gateway Oaks Drive should be based on a combination of different factors including: (i) impacts on the arterial street (West El Camino Avenue) that is typically used to serve a regional traffic demand versus increased volumes on local, residential streets within and adjacent to newly developed residential subdivision, (ii) providing additional circulation opportunity by means of alternate route via proposed new loop road, (iii) providing connectivity between the existing developments that comprise of existing mix of residential, office and commercial uses, and the new residential development, (iv) providing narrower (residential) streets within the residential areas and ensuring consistency with smart growth policies versus requiring wider (collector) streets, (v)potential future concerns of the residents within both existing and proposed neighborhoods regarding increased cut-through traffic, with a subsequent need for Traffic Calming and other Neighborhood Traffic Management Programs, and etc.

# **CHAPTER 5**

**CEQA DISCUSSIONS** 

#### CHAPTER 5 CEQA DISCUSSIONS

#### 5.1 GROWTH INDUCING EFFECTS OF THE PROPOSED PROJECT

The CEQA Guidelines require an EIR to evaluate indirect or secondary effects of a project, which may include growth-inducing effects. Section 15126.2(d) of the CEQA Guidelines states that a project could be considered growth inducing if it could "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." A development project may have growth-inducing potential if, for example, it extends infrastructure (e.g., water, sewer, roads) to undeveloped areas or increases the capacity of existing infrastructure; promotes similar development to occur on adjacent parcels; increases the area's housing supply; or introduces new employment to an area.

In the absence of other favorable conditions, however, it is unlikely that any one of these components could induce significant growth. The magnitude, location, and timing of growth are ultimately determined by a mix of economic, political, physical, and social factors. Variables including regional economic trends, housing demand, land availability and cost, quality of infrastructure and public services, proximity to employment centers, and regulatory considerations affect the way in which growth occurs.

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the extent to which growth could be induced, accelerated, intensified, or shifted as a result of developing the River Oaks Park project. The framework for a discussion of these potential growth-inducing impacts includes contemplation of the following questions:

- 1. Would the project foster economic or population growth or the construction of additional housing?
- 2. Would the project remove obstacles to population growth?
- 3. Would the project tax existing community facilities to the point of requiring construction of new facilities (construction of which may adversely impact the environment)?
- 4. Would the project encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

#### **Method of Evaluation**

The City of Sacramento General Plan and the South Natomas Community Plan provide for development of the River Oaks Park site as residential development while the Sacramento City Code provides for Agriculture and Agricultural Planned Unit development. Refer to Table 2.1 in Chapter 2 Project Description. The proposed project is also located in the City's Willowcreek Assessment District No. 96-01. The district was formed by the City of Sacramento in 1997 to assess new development for the cost of infrastructure needed to serve it.

The lands surrounding the proposed River Oaks Park site are largely developed. Interstate 80 is located directly to the north. Land uses immediately adjacent to the project site include residential development south along West El Camino Avenue and east across the Natomas Main Drainage Canal. An office park with three commercial office buildings and frontage to both Interstate 80 and Interstate 5 is located across the Canal northeast of the project site. Barandas Park is located across the Canal along the north side of West El Camino Avenue. The

land north across Interstate 80 from the project site is in crop production. A truck stop, fueling station, and restaurant are located across the overpass and are visible from the project site. West of the site is vacant undeveloped commercial.

Constraints to growth in the project vicinity were evaluated qualitatively based on existing land use designations and land uses, and the capacity and extent of proposed infrastructure improvements. Based upon direction in the CEQA Guidelines, these elements were determined to be key in ascertaining whether the project would induce additional growth beyond the amount anticipated in the *General* and *Community Plans*.

#### **Current Constraints to Growth**

The lack of infrastructure and the lack of substantial acreage available for new development constitute the principal limiting growth factors in the project area. Necessary utilities are not currently located on the River Oaks project site (i.e., water, sewer, electricity, natural gas, and cable). However, the entire proposed project site is located within existing boundaries of all applicable service providers. Since the site is designated in the *South Natomas Community Plan* and *City of Sacramento General Plan* for residential development, development of this type is anticipated to occur. The current zoning for the River Oaks project site consists of ±13.5 acres of Agriculture (A) and ±66.9 acres as Agriculture Planned Unit Development (A-PUD). However, these agricultural zoning districts are not consistent with the General or Community Plans. Agriculture (A) zoned parcels would be considered for reclassification when proposed for urban development which is consistent with the general plan. Agriculture Planned Unit Development (A-PUD) zoned parcels are designed to prevent the premature development of land in this category to urban uses.

#### **Removal of Growth Constraints**

Changes in Land Use As presented, the proposed project is consistent with the General Plan and is requesting amendments to land use within the Community Plan and zoning designations within the Sacramento City Code. Table 1.2 in the Initial Study (refer to Appendix C) provides a comparison of the overall existing and proposed densities for the project site. The table indicates the number of housing units allowed by the Community Plan is between 422-710 dwelling units. The project is proposing 642 units through a PUD, and is consistent with the overall number of units called for in the Community Plan. Therefore, the change in land use for the project site does not represent a substantial growth inducing effect.

The project proposes that the zoning regulations be amended to change the old agricultural district designations to residential designations consistent with the adopted *Community* and *General Plans*. This proposal would change the zoning to Single Family Alternate Planned Unit Development (R1-A PUD). The area surrounding the project site has been, and is continuing to develop with urban uses consistent with the *Community* and *General Plans*; therefore, the change in use is not anticipated to represent a substantial growth inducing effect within the City. However, the change in zoning may represent a growth inducing effect within the adjacent unincorporated areas of Sacramento County. The land across Interstate 80 from the project site is currently under crop production and is designated Agricultural Cropland in the *County of Sacramento General Plan* (1993). The proposed project has the potential to encourage landowners to the north of the site to apply for rezoning due to the proposed rezoning of the River Oaks Park project site.

Infrastructure Development The proposed project will extend infrastructure (i.e., water, sewer, electricity, natural gas, cable) to ±80.33 acres to construct 642 units of market rate single-family housing on land currently used for agricultural production and a single-family home. The applicant would extend sewer and water supply infrastructure from the existing mainlines along West El Camino Avenuee and Orchard Lane. The project does not require annexation into any service area to obtain any public services. Sufficient capacity is available in each service system to serve the proposed project. The project is consistent with the water demand planned for in the Community Plan. The project applicant will be required to prepare a project sewer study to ensure the project sewer infrastructure integrates with the existing municipal conveyance system in accordance with County and City. The infrastructure extension required to serve the project is consistent with the Community Plan to provide infrastructure to new development throughout the plan area and consistent with the planned growth in the Community Plan area.

Improvements to West El Camino Avenue and Orchard Lane are currently underway and include widening and extension. The project applicant is required to dedicate rights-of-way to the City to accommodate improvements to West El Camino Avenue and Orchard Lane. In addition, as part of the proposed project, new roadways include Riverdale Drive, River Oaks Way, and an emergency access road. This new infrastructure, as well as a pedestrian bridge over the Canal will be constructed by the applicant. As mitigation for project impacts to traffic operations, the project applicant/developer would be required to construct and/or dedicate rights-of-way for several roadway improvements. As discussed in CHAPTER 4 ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES - TRAFFIC AND CIRCULATION, these improvements include installation of traffic signals and widening of West El Camino The majority of these improvements are included in current transportation Avenue. infrastructure plans for the City. Infrastructure development proposed with the River Oaks Park project and required as mitigation for project impacts represents a growth-inducing impact.

**Population Growth** The River Oaks Park project proposes to construct 642 single family homes. The 2000 U.S. Census reported the average owner occupied household size in the City of Sacramento as being 2.65 persons. Given the average household size, it is estimated 1,701 persons will live at the project site subsequent to construction and full occupancy of its 642single-family homes. In 2000, according to the *City of Sacramento General Plan Housing Element*, the entire area of the *Community Plan* was 3,521 persons short of the buildout population of 42,199 persons (SGPU HE). The proposed project, if built, would therefore accommodate 48.3 percent of remaining *Community Plan* buildout population.

While the proposed project would accommodate close to half of the remaining *Community Plan* buildout population, this growth is consistent with that called for in the *Community Plan*. Therefore, the growth induced by the project is within the population projection thresholds identified in the *Community Plan* and will have a less-than-significant growth inducing effect.

#### 5.2 IRREVERSIBLE ENVIRONMENTAL CHANGES

Until recently, the majority of land at the proposed River Oaks Park project site was seasonally active with production of a variety of crops, including corn, peppers, tomatoes, and melons. The site was graded and trenched annually for crop irrigation and drainage. A ±1,200 square

foot single family home occurred along Orchard Lane and was removed in the summer and fall of 2004. Remnants of former residences occur along West El Camino Avenue and near the center of the project site. These areas support old foundations, basements, debris, and old equipment.

Implementation of the project as proposed would result in the irreversible conversion of ±80 acres of vacant, agricultural land to residential uses while ±11 acres of the project area would support parkland uses. The implementation of the proposed project would generate increased traffic levels in the immediate vicinity of the project as well as contribute to increases in local and regional congestion. While the mitigation measures for baseline and cumulative plus project conditions would reduce the level of significance of the project impacts to traffic and circulation, some traffic impacts at the baseline and cumulative plus project traffic scenarios are considered significant and unavoidable.

Other irreversible incremental environmental changes resulting from development of the proposed project include the potential for disturbing biological resources on the site, the need for increased levels of public services (i.e., utilities, law enforcement, fire protection, and schools), and the permanent commitment of resources such as water supplies, building materials, and wastewater treatment plant capacity to develop and serve the proposed project. The implementation of the proposed project is expected to generate significant increases in traffic levels in the project vicinity.

#### 5.3 CUMULATIVE IMPACTS OF THE PROPOSED PROJECT

Cumulative impacts are defined by the CEQA Guidelines as "two or more individual effects which, when considered together, are considerable or which compound or increase other impacts." Section 15130 of the CEQA Guidelines requires that an EIR discuss such impacts "when the project's incremental effect is cumulatively considerable." Section 15355 of the CEQA Guidelines frames this analysis by providing another definition of cumulative impacts and the types of projects which can result in such impacts:

The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

The cumulative impacts section describes the impacts of the proposed River Oaks Park project as part of the total development of the *Community Plan* area. The analysis for this section is based on "a summary of projections contained in an adopted general plan or related planning documents which is designed to evaluate regional or area-wide conditions" [Section 15130 (b)(1)(B), CEQA Guidelines], which in this case is the cumulative conditions presented in the *South Natomas Community Plan EIR* (City of Sacramento, 1988). The past, present, and reasonably foreseeable probable projects to be included in the cumulative impact analysis pursuant to CEQA Guidelines, Section 15130, is the buildout of the *Community Plan*, as described in that Plan. As discussed above, the proposed project, if built, would accommodate 49.2 percent of remaining *Community Plan* buildout population. While the proposed project would accommodate close to half of the remaining *Community Plan* buildout population, this growth is consistent with that called for in the *Community Plan*.

As the River Oaks Park EIR focuses on impacts in the environmental analysis area of Traffic and Circulation, analysis of cumulative impacts also focuses on this resource area. CHAPTER 4 ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES - TRAFFIC AND CIRCULATION contains the cumulative impacts analysis (at year 2025) for the River Oaks Park project under six scenarios:

- © Cumulative No Project with 4-lanes on West El Camino Avenue
- © Cumulative Plus Project without Gateway Oaks Drive Extension and with 4-lanes on West El Camino Avenue
- © Cumulative Plus Project with Gateway Oaks Drive Extension and with 4-lanes on West El Camino Avenue
- Cumulative No Project with 6-lanes on West El Camino Avenue
- © Cumulative Plus Project without Gateway Oaks Drive Extension and with 6-lanes on West El Camino Avenue
- © Cumulative Plus Project with Gateway Oaks Drive Extension and with 6-lanes on West El Camino Avenue

Please refer to **CHAPTER 4** for a discussion of cumulative impacts.

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## **CHAPTER 6**

## PROJECT ALTERNATIVES

Prepared by Dowling Associates, Inc. with introduction by North Fork Associates

#### **CHAPTER 6 PROJECT ALTERNATIVES**

Pursuant to CEQA Guidelines Section 15126.6(a), an EIR shall describe "a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." The evaluation of alternatives shall explain why the proposed project was selected over other development scenarios, including the "no project" alternative and alternatives that would eliminate or reduce significant adverse environmental impacts. Less detailed discussion may occur where an alternative causes one or more significant impacts in addition to those described for the proposed project. In addition, this section will identify the "environmentally superior alternative" (CEQA).

The range of alternatives is limited by the "rule of reason," and the EIR should discuss the rationale for selecting the alternatives to be evaluated. The "rule of reason" is described in Section 15126.6(f):

Rule of reason. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making.

In accordance with these guidelines, this discussion will not include consideration of alternatives determined to be remote or speculative, that would not avoid or lessen significant impacts, or that could not attain the basic objectives of the proposed project.

Pursuant to CEQA Guidelines Section 15126.6(f)(2), the discussion of alternatives should include an offsite alternative if "any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location." However, it is possible that no feasible alternative sites for the project exist (CEQA Guidelines, Section 15126.6(f)(2)(B)).

#### 6.1 SELECTION OF ALTERNATIVES FOR THE RIVER OAKS PARK PROJECT

As required in CEQA Guidelines Section 15126.6, project alternatives selected for analysis are those alternatives capable of eliminating or lessening one or more of the significant adverse environmental effects of the project as proposed. Alternatives were selected based on feasibility and ability to meet basic project objectives, but potential alternatives were not rejected based on their likelihood to slightly impede the attainment of the project objectives or their likelihood to be more costly than the proposed project.

#### **Objectives of the Proposed Project**

The proposed River Oaks Park project has the following objectives:

1. Develop homes that may appeal to first-time homebuyers close to Downtown Sacramento;

- 2. Develop parkland at a ratio of 5.0 acres for every 1,000 residents of the project site;
- 3. Create a Planned Unit Development which integrates City of Sacramento Smart Growth goals of integrated walkable neighborhoods and provide recreation and residential opportunities in close proximity to Downtown Sacramento and regional transportation;
- 4. Develop a road and multi-mode trail system that integrates City of Sacramento street standards and meets the objectives of the City of Sacramento Bikeways Master Plan;
- 5. Develop residential uses consistent with the goals of the South Natomas Community Plan.

Alternatives included in this analysis were selected partly based on their ability to meet the basic intent of these objectives.

#### **Impacts of the Proposed Project**

As discussed in CHAPTER 1 INTRODUCTION, previous analysis of the proposed project found that potentially significant impacts occur in only one CEQA topic area – Traffic and Circulation. Therefore, the analysis of alternatives focuses on this topic and the ability of each alternative to reduce impacts in this area. Most of the proposed project impacts were found to be less than significant after implementation of mitigation measures included in the EIR. However, street segment impacts under three traffic scenarios will remain Significant and Unavoidable. These significant and unavoidable street segment impacts are:

- 1. Baseline Plus Project Conditions:
  - West El Camino Avenue between El Centro Road and I-80 Westbound Ramps
  - West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane
  - West El Camino Avenue between Grassland Way and Gateway Oaks Drive
- 2. Cumulative Plus Project without Gateway Oaks Drive Extension Conditions (with Four Lanes on West El Camino Avenue):
  - West El Camino Avenue between I-80 Eastbound Ramps and I-5 Southbound Ramps
- 3. Cumulative Plus Project with Gateway Oaks Drive Extension Conditions (with Four Lanes on West El Camino Avenue):
  - West El Camino Avenue between I-80 Eastbound Ramps and Orchard Lane
  - West El Camino Avenue between Grassland Way and Gateway Oaks Drive

#### 6.2 ALTERNATIVES CONSIDERED AND REJECTED

Several potential alternatives were considered during preparation of this analysis. Of the potential alternatives, two onsite alternatives were rejected from further consideration based on either their inability to meet the project objectives and/or their inability to decrease the significant traffic impacts of the proposed project. It was determined that no offsite alternatives were feasible for the proposed project due to the constraints of property ownership within the City. The two onsite alternatives that were rejected include a Code-Compliant Alternative and a Commercial/Residential Alternative.

The Code-Compliant Alternative would consist of a project that did not require an amendment to the *South Natomas Community Plan*. Using the maximum number of units that could be built under the existing land use designation (the higher end of each of the two existing land use designations was multiplied by its respective net acreage and then added together), the project site could support 615 units under the Code-Compliant Alternative. The proposed project would construct 642 units. The Code-Complaint Alternative would therefore represent an approximate 2 percent decrease from the proposed project with regards to trip generation. This difference was not considered large enough to reduce the significant traffic and circulation impacts of the proposed project. In addition, the proposed project is more consistent with the City's Community Plan and General Plan policies by providing Parks/Open Space and Recreation Center land use designations.

The Commercial/Residential Alternative would consist of a project to amend the *General Plan* and *Community Plan* and the *Sacramento City Code* to allow for the construction of 375,000 square feet of commercial office buildings along Interstate 80 and up to 575 single family homes off of West El Camino Avenue. The project would also extend Gateway Oaks Drive across the Natomas Main Drainage Canal. This alternative was rejected because it would generate more trips than the proposed project and would, therefore, not reduce the significant traffic and circulation impacts of the proposed project. This alternative is also not consistent with objectives 1 and 2 of the proposed project, as listed above.

#### 6.3 ALTERNATIVES SELECTED FOR ANALYSIS

Two project alternatives were selected for discussion and comparison with the proposed project. They are summarized as follows:

#### Alternative 1: No Project Alternative – No Development

Analysis of the No Project alternative is described in Section 15126.6 (e) of the CEQA Guidelines. Specifically Section 151266 (e)(3)(b) states:

If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in the existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" where the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of the existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.

In light of Section 15126.6 (e)(3)(b), the No Project alternative could assume that the proposed project would not be developed and the  $\pm 80$ -acre project site would remain vacant. This No-Development scenario is represented by Alternative 1.

As stated in Section 15126.6(e)(3)(b), the No-Project alternative could also consider a different yet similar development on the proposed project site. Since residential development on the proposed site is anticipated in the General and Community Plans, it is likely that the site would ultimately be developed even if the currently proposed River Oaks Park project were not approved. Analysis of the likely proposal of another development project onsite as a potential "no project" consequence, as discussed in the CEQA Guidelines, is provided with Alternative 2, which contemplates construction of a different density of residential uses on the proposed project site.

#### Alternative 2: Low Density Alternative

The Low Density Alternative consists of 295 single-family residential units.

The analyses of the No Project and Low Density Alternatives were prepared by the City of Sacramento and Dowling and Associates and are provided in the following pages. Section 6.4 below discusses the environmentally superior alternative.

#### 6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The two project alternatives evaluated on the following pages result in less impact overall when considering the significant traffic and circulation impacts of the proposed project. These are the No Project and Low Density Alternatives. Since the No Project (no development) alternative does not meet any of the objectives of the project and it is likely that the project site would eventually be developed in accordance with the *Community Plan*, this alternative would not be considered a feasible environmentally superior alternative. Therefore, the Low Density Alternative is the environmentally superior alternative. Overall, the Low Density Alternative is anticipated to produce less impact with regard to the significant traffic and circulation impacts of the proposed project (e.g., roadway segment impacts) since the Low Density Alternative is estimated to generate fewer total daily trips (40-45 percent less trips than the proposed project). However, this alternative, with only 295 single family homes, falls short of the proposed project objective of developing 642 single-family homes as well as the current *Community Plan* allowed maximum number range of units for the project site (422-710 units).

#### 6.5 ALTERNATIVES TO THE PROPOSED PROJECT

In this section, two alternatives to the Proposed Project are analyzed: the No Project Alternative, as required by the California Environmental Quality Act (CEQA), is analyzed quantitatively; and the Low Density Alternative is analyzed on a qualitative basis.

As mentioned in the Traffic and Circulation Section, during the final stage of this traffic impact analysis, the Proposed Project has been revised from consisting 708 residential units to 642 residential units. This traffic analysis is not revised to incorporate the project revisions and is based on a more conservative approach by assuming a larger number of residential units.

#### No Project Alternative

The No Project Alternative would not change the number of vehicle trips at the study area intersections, freeway off-ramps, and street segments and would therefore result in no impacts under all the analysis scenarios. Similarly, the No Project Alternative would not increase bicycle trips, pedestrian trips, and the transit ridership within the study area. This alternative

would not result in any changes to existing or planned bicycle and pedestrian system. The No Project Alternative would therefore result in no impacts to the Bicycle System, Pedestrian System and Transit System within the study area.

The discussion below summarizes the traffic operations for the No Project Alternative under different analysis scenarios. This discussion presents the traffic operations conditions in terms of acceptable or unacceptable conditions within the study area intersections, freeway off-ramps, and street segments.

#### Intersections

#### **Baseline No Project Conditions**

As shown in Table 6 in the Traffic and Circulation Section, all the intersections within the study area would operate at acceptable conditions per City's standards under Baseline No Project conditions, except for the intersection of West El Camino Avenue and I-80 Ramps and the intersection of West El Camino Avenue and Gateway Oaks Drive. These three intersections would operate at unacceptable level of service as per City standards (refer to Page 37 in the Traffic and Circulation Section for discussion.

#### Cumulative No Project Conditions - 4 Lanes on West El Camino Avenue (Year 2025)

Under the Cumulative No Project Conditions (4 lanes on West El Camino Avenue), West El Camino Avenue would be widened to 4 lanes between El Centro Road and I-5 SB ramps. The intersections of West El Camino Avenue/I-80 EB Ramps, and West El Camino Avenue/I-80 WB Ramps would be signalized.

Table 16 in the Traffic and Circulation Section summarizes the level of service results for the study intersections under the Cumulative No Project (with 4 lanes on West El Camino Avenue) scenario. As shown in Table 16, all intersections would operate at an acceptable level of service of C or better under the Cumulative No Project (with 4 lanes on West El Camino Avenue) scenario, except for three intersections: the intersection of West El Camino Avenue and Orchard Lane would operate at LOS D during the AM peak hour; the intersection of West El Camino Avenue and Gateway Oaks Drive would operate at LOS D during the PM peak hour; and the intersection of West El Camino Avenue and Azevedo Drive would operate at LOS D during the AM peak hour.

#### Cumulative No Project Conditions - 6 Lanes on West El Camino Avenue (Year 2025)

Under the Cumulative No Project Conditions (6 lanes on West El Camino Avenue), West El Camino Avenue would be widened to 6 lanes between El Centro Road and I-5 SB ramps. The intersections of West El Camino Avenue/I-80 EB Ramps, and West El Camino Avenue/I-80 WB Ramps would be signalized.

Table 31 in the Traffic and Circulation Section summarizes the level of service results for the study intersections under the Cumulative No Project (with 6 lanes on West El Camino Avenue) scenario. As shown in Table 31, all intersections would operate at an acceptable level of service of C or better under the Cumulative No Project (with 6 lanes on West El Camino Avenue) scenario, except for three intersections: the intersection of West El Camino Avenue and Orchard Lane would operate at LOS D during the AM peak hour; the intersection of West El Camino

Avenue and Gateway Oaks Drive would operate at LOS D during the PM peak hour; and the intersection of West El Camino Avenue and Azevedo Drive would operate at LOS D during the AM peak hour.

#### Street Segments

#### **Baseline No Project Conditions**

The Baseline No Project conditions average daily traffic (ADT) volumes and LOS on study street segments are shown in Table 7 and graphically in *Figure 11* in the Traffic and Circulation Section.

All street segments would operate at acceptable LOS, except for two segments on West El Camino Avenue. As shown in Table 7, the segment on West El Camino Avenue between El Centro Road and I-80 EB Ramps including the freeway overcrossing and the segment between I-80 EB Ramp and Orchard Lane would operate at LOS F.

#### Cumulative No Project Conditions - 4 Lanes on West El Camino Avenue (Year 2025)

The Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes and LOS on study street segments are shown in Table 17 and graphically in *Figure 20* in the Traffic and Circulation Section. As shown in Table 17, all the study area street segments would operate at acceptable LOS except for the street segment of West El Camino Avenue between I-80 EB ramp and Orchard Lane, which would operate at unacceptable conditions of LOS D.

#### Cumulative No Project Conditions - 6 Lanes on West El Camino Avenue (Year 2025)

The Cumulative No Project (with 6 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes and LOS on study street segments are shown in Table 32 and graphically in *Figure 33* in the Traffic and Circulation Section. All study street segments would operate at acceptable LOS under this scenario.

#### Freeway Off-Ramps

#### **Baseline No Project Conditions**

Freeway Off-Ramps were analyzed to determine whether the available storage lengths are adequate for the anticipated queues. Table 8 in the Traffic and Circulation Section presents the comparison of the queue length and the storage length for the Baseline No Project conditions. The I-80 EB Off-ramp would not have adequate capacity to store the anticipated queue during the PM peak hour.

#### Cumulative No Project Conditions - 4 Lanes on West El Camino Avenue (Year 2025)

Table 18 in the Traffic and Circulation Section presents the comparison of the queue length and the storage length for the Cumulative No Project (with 4 lanes on West El Camino Avenue) conditions. With the capacity expansion and the signal improvements, all three freeway off-ramps would have adequate capacity to store the anticipated queue.

#### Cumulative No Project Conditions - 6 Lanes on West El Camino Avenue (Year 2025)

Table 33 in the Traffic and Circulation Section presents the comparison of the queue length and the storage length for the Cumulative No Project (with 6 lanes on West El Camino Avenue) conditions. With the expansion of capacity and the signal improvements, all three freeway off-ramps would have adequate capacity to store the anticipated queue.

#### **Low Density Alternative**

The Low Density Alternative consists of 295 single-family residential units. This alternative is analyzed qualitatively and compared to the impacts generated by the Proposed Project. Table 1 presents the trip generated by the Proposed Project and the Low Density Alternative.

Table 1: Proposed Project Trip Generation

	Amount		Number of Trips						
Land Use			AM Peak Hour			PM Peak Hour			Weekday
			In	Out	Total	ln	Out	Total	
Proposed Project									
Residential - SF	708.0	DU	126	379	505	393	231	624	6,295
Low Density Alternative									
Residential - SF	295.0	DU	54	162	216	179	105	284	2,813

SOURCE: Trip Generation, 7th Edition, Institute of Transportation Engineers, 2003

Trip generation of the Proposed Project and the Alternative is based upon information compiled by the Institute of Transportation Engineers (*Trip Generation*, Seventh Edition 2003). In summary, the Low Density Alternative would generate approximately 40-45 percent less trips than the Proposed Project. As mentioned at the beginning of this section, the Low Density Alternative is analyzed on a qualitative basis. The analysis is therefore comparative, identifying whether implementation of this alternative would result in a greater, less or similar impact to the Proposed Project. The qualitative discussion also states the level of significance of the impact.

#### Intersections

#### **Baseline Plus Low Density Alternative Conditions**

#### **Impacts**

As shown in *Tables 9* and 10 in the Traffic and Circulation Section, the Proposed Project traffic would create significant impacts at the intersections of: (i) West El Camino Avenue/I-80 Westbound Off-Ramps, (ii) West El Camino Avenue/I-80 Eastbound Off-Ramps, and (iii) West El Camino Avenue/River Oaks Way (Proposed)/West River Drive.

Since the Low Density Alternative generates fewer trips than the Proposed Project by approximately half, the impacts caused by this alternative would be *less* than the Proposed Project. However, due to the additional traffic generated by the Low Density Alternative, the resulting impacts of this alternative at the above mentioned intersections are likely to remain as significant impacts.

#### **Mitigations**

The necessary mitigation measures required to offset the significant traffic impacts at the above mentioned intersections would be the same as the Proposed Project, and are discussed in the Traffic and Circulation Section.

Cumulative Plus Low Density Alternative Conditions without Gateway Oaks Drive Extension - 4 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Tables 19 and 20 in the Traffic and Circulation Section summarize the level of service results for the study intersections under the Cumulative Plus Proposed Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) scenario. With the extra capacity on West El Camino Avenue after the widening and the signal improvements, all intersections would operate at an acceptable level of service of C or better under the Cumulative Plus Proposed Project (with 4 lanes on West El Camino Avenue) scenario, except for one intersection: the intersection of West El Camino Avenue and Gateway Oaks Drive.

Since the Low Density Alternative generates fewer trips than the Proposed Project by approximately half, the impacts caused by this alternative would be *less* than the Proposed Project. However, due to the additional traffic generated by the Low Density Alternative, the resulting impacts of this alternative at the above mentioned intersections are likely to remain as **significant impacts**.

#### Mitigations

The necessary mitigation measures required to offset the significant traffic impacts at the above mentioned intersections would be the same as the Proposed Project, and are discussed in the Traffic and Circulation Section.

Cumulative Plus Low Density Alternative Conditions with Gateway Oaks Drive Extension - 4 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Tables 25 and 26 in the Traffic and Circulation Section summarize the level of service results for the study intersections under the Cumulative Plus Proposed Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) scenario. With the extra capacity on West El Camino Avenue after the widening, all intersections would operate at an acceptable level of service of C or better under the Cumulative Plus Proposed Project (with 4 lanes on West El Camino Avenue) scenario, except for one intersection: the intersection of West El Camino Avenue and Orchard Lane Drive.

Since the Low Density Alternative generates fewer trips than the Proposed Project by approximately half, the impacts caused by this alternative would be less than the Proposed Project. However, due to the additional traffic generated by the Low Density Alternative, the resulting impacts of this alternative at the above mentioned intersections are likely to remain as significant impacts.

#### **Mitigations**

The necessary mitigation measures required to offset the significant traffic impacts at the above mentioned intersections would be the same as the Proposed Project, and are discussed in the Traffic and Circulation Section.

Cumulative Plus Low Density Alternative Conditions without Gateway Oaks Drive Extension – 6 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Tables 34 and 35 in the Traffic and Circulation Section summarize the level of service results for the study intersections under the Cumulative Plus Proposed Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario. With the extra capacity on West El Camino Avenue after the widening, all intersections would operate at an acceptable level of service of C or better under the Cumulative Plus Proposed Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario. Similar to the Proposed Project scenario, the Low Density Alternative would not cause any significant impacts.

#### Mitigations

Similar to the Proposed Project scenario, no mitigation measures are required.

Cumulative Plus Low Density Alternative Conditions with Gateway Oaks Drive Extension - 6 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Tables 43 and 44 in the Traffic and Circulation Section summarize the level of service results for the study intersections under the Cumulative Plus Proposed Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario. With the extra capacity on West El Camino Avenue after the widening, all intersections would operate at an acceptable level of service of C or better under the Cumulative Plus Proposed Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) scenario, except for one intersection: the intersection of West El Camino Avenue and Orchard Lane Drive. The Proposed Project would barely cause a significant impact at the above intersection. Since the Low Density Alternative generates fewer trips than the Proposed Project by approximately half, the impacts caused by the Low Density Alternative would be less than the Proposed Project. The Low Density Alternative would most likely not cause any significant impact.

#### Mitigations

No mitigation measures are required.

#### Street Segments

## Baseline Plus Low Density Alternative Conditions Impacts

As shown in *Table 11* in the Traffic and Circulation Section, the Proposed Project traffic would create **significant impacts** on three street segments on West El Camino Avenue: (i) between El

Centro Road and I-80 WB Ramps, (ii) between I-80 EB Ramps and Orchard Lane, and (iii) between Grassland Way and Gateway Oaks Drive.

Since the Low Density Alternative generates fewer trips than the Proposed Project by approximately half, the impacts caused by this alternative would be *less* than the Proposed Project. However, the Low Density Alternative would add traffic to the Baseline No Project condition. The resulting impacts of this alternative at the above mentioned street segments are therefore likely to remain as **significant impacts**.

#### Mitigations

The necessary mitigation measures required to offset the significant traffic impacts on the above mentioned street segments would be the same as the Proposed Project, and are discussed in the Traffic and Circulation Section.

Cumulative Plus Low Density Alternative Conditions without Gateway Oaks Drive Extension - 4 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Table 21 in the Traffic and Circulation Section summarizes the Cumulative Plus Proposed Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes on study area street segments. The Proposed Project traffic would still create **significant impacts** on the portion of *West El Camino Avenue between I-80 EB Ramps and I-5 SB Ramps*.

Since the Low Density Alternative generates fewer trips than the Proposed Project by approximately half, the impacts caused by this alternative would be *less* than the Proposed Project. However, the Low Density Alternative would add traffic to the Cumulative No Project condition. The resulting impacts of this alternative at the above mentioned street segments are therefore likely to remain as **significant impacts**.

#### Mitigations

The necessary mitigation measures required to offset the significant traffic impacts on the above mentioned street segments would the same as the Proposed Project, and are discussed in the Traffic and Circulation Section.

Cumulative Plus Low Density Alternative Conditions with Gateway Oaks Drive Extension - 4 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Table 27 in the Traffic and Circulation Section summarizes the Cumulative Plus Proposed Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes on study area street segments. As shown in Table 27, the Proposed Project traffic would create **significant impacts** on the portion of West El Camino Avenue between I-80 EB Ramps and Orchard Lane, and between Grassland and Gateway Oaks Drive.

Since the Low Density Alternative generates fewer trips than the Proposed Project by approximately half, the impacts caused by this alternative would be *less* than the Proposed

Project. However, the Low Density Alternative would add traffic to the Cumulative No Project condition. The resulting impacts of this alternative at the above mentioned street segments are therefore likely to remain as **significant impacts**.

#### Mitigations

The necessary mitigation measures required to offset the significant traffic impacts on the above mentioned street segments would the same as the Proposed Project, and are discussed in the Traffic and Circulation Section.

Cumulative Plus Low Density Alternative Conditions without Gateway Oaks Drive Extension - 6 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Table 36 in the Traffic and Circulation Section summarizes the Cumulative Plus Proposed Project without Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes on study area street segments. With the extra capacity on West El Camino Avenue after the widening, all street segments would operate at an acceptable level of service of C or better. Similar to the Proposed Project scenario, the Low Density Alternative would not cause any significant impacts.

#### Mitigations

Similar to the Proposed Project scenario, no mitigation measures are required.

Cumulative Plus Low Density Alternative Conditions with Gateway Oaks Drive Extension - 6 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

*Table 47* in the Traffic and Circulation Section summarizes the Cumulative Plus Proposed Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) conditions average daily traffic (ADT) volumes on study area street segments. With the extra capacity on West El Camino Avenue after the widening, all street segments would operate at an acceptable level of service of C or better. Similar to the Proposed Project scenario, the Low Density Alternative would not cause any significant impacts.

#### Mitigations

Similar to the Proposed Project scenario, no mitigation measures are required.

#### Freeway Off-Ramps

**Baseline Plus Low Density Alternative Conditions** 

#### **Impacts**

Tables 12 and 13 in the Traffic and Circulation Section present the comparison of the queue length and the storage length for the Baseline Plus Project Project conditions. The Proposed Project traffic would create **significant impacts** on two freeway off-ramps: (i) I-80 WB Off-Ramp at West El Camino Avenue, and (ii) I-80 EB Off-Ramp at West El Camino Avenue.

Since the Low Density Alternative generates fewer trips than the Proposed Project by approximately half, the impacts caused by this alternative would be *less* than the Proposed Project. However, due to the additional traffic generated by the Low Density Alternative, the resulting impacts of this alternative at the above-mentioned freeway off-ramps are likely to remain as **significant impacts**.

#### Mitigations

The necessary mitigation measures required to offset the significant traffic impacts at the above mentioned freeway off-ramps would the same as the Proposed Project, and are discussed in the Traffic and Circulation Section.

Cumulative Plus Low Density Alternative Conditions without Gateway Oaks Drive Extension - 4 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Tables 22 and 23 in the Traffic and Circulation Section present the comparison of the queue length and the storage length for the Cumulative Plus Proposed Project without Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions. With the extra capacity on West El Camino Avenue after the widening and the improvements at the I-80 Ramp intersections, all three freeway off-ramps would have adequate capacity to store the anticipated queue. Similar to the Proposed Project scenario, the Low Density Alternative would not cause any significant impacts.

#### Mitigations

Similar to the Proposed Project scenario, no mitigation measures are required.

Cumulative Plus Low Density Alternative Conditions with Gateway Oaks Drive Extension - 4 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Tables 28 and 29 in the Traffic and Circulation Section present the comparison of the queue length and the storage length for the Cumulative Plus Proposed Project with Gateway Oaks Drive Extension (with 4 lanes on West El Camino Avenue) conditions. With the extra capacity on West El Camino Avenue after the widening and the improvements at the I-80 Ramp intersections all three freeway off-ramps would have adequate capacity to store the anticipated queue. Similar to the Proposed Project scenario, the Low Density Alternative would not cause any significant impacts.

#### Mitigations

Similar to the Proposed Project scenario, no mitigation measures are required.

Cumulative Plus Low Density Alternative Conditions without Gateway Oaks Drive Extension - 6 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Tables 38 and 39 in the Traffic and Circulation Section present the comparison of the queue length and the storage length for the Cumulative Plus Proposed Project without Gateway Oaks

Drive Extension (with 6 lanes on West El Camino Avenue) conditions. With the extra capacity on West El Camino Avenue after the widening and the improvements at the I-80 Ramp intersections all three freeway off-ramps would have adequate capacity to store the anticipated queue. Similar to the Proposed Project scenario, the Low Density Alternative would not cause any significant impacts.

#### Mitigations

Similar to the Proposed Project scenario, no mitigation measures are required.

Cumulative Plus Low Density Alternative Conditions with Gateway Oaks Drive Extension - 6 Lanes on West El Camino Avenue (Year 2025)

#### **Impacts**

Tables 42 and 43 in the Traffic and Circulation Section present the comparison of the queue length and the storage length for the Cumulative Plus Proposed Project with Gateway Oaks Drive Extension (with 6 lanes on West El Camino Avenue) conditions. With the extra capacity on West El Camino Avenue after the widening and the improvements at the I-80 Ramp intersections all three freeway off-ramps would have adequate capacity to store the anticipated queue. Similar to the Proposed Project scenario, the Low Density Alternative would not cause any significant impacts.

#### Mitigations

Similar to the Proposed Project scenario, no mitigation measures are required.

#### Bicycle, Pedestrian, and Transit Impacts

As discussed in the Traffic and Circulation Section the implementation of the Proposed Project would result in no impact to the Bicycle System, Pedestrian System and Transit System within the study area under all the scenarios analyzed in this study. The following discussion is therefore aimed at presenting a qualitative analysis of the impacts of the Low Density Alternative to Bicycle System, Pedestrian System and Transit System within the study area under all the scenarios.

#### **Bicycle System Impacts**

#### Impacts (for all scenarios)

As discussed in the Traffic and Circulation Section, the Proposed Project would result in an increase in bicycle trips in the study area. However, the Proposed Project is not anticipated to hinder or eliminate the existing bikeways or interfere with the implementation of the planned bikeways in the study area. Moreover, the development of the Proposed Project would result in additional bikeway improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal. As a result, the implementation of the Proposed Project would result in no impact to the bicycle system.

Since the Low Density Alternative proposes significantly less number of residential units than the Proposed Project, this alternative would add fewer bicycle trips than the Proposed Project. The bicycle system impacts caused by this alternative would therefore be *less* than the Proposed

Project. In view of this and for the reasons mentioned above (similar to the Proposed Project scenario), the Low Density Alternative would not create any significant impacts to the Bicycle System under all scenarios.

#### Mitigations (for all scenarios)

Similar to the Proposed Project scenario, no mitigation measures are required.

#### **Pedestrian System Impacts**

#### Impacts (for all scenarios)

As discussed in the Traffic and Circulation Section, the Proposed Project would result in an increase in pedestrian trips in the study area. However, the Proposed Project is not anticipated to result in an unsafe condition for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflict. Moreover, the development of the Proposed Project would result in additional pedestrian improvements along the proposed streets within and adjacent to the Project site in accordance with the City's Street Standards, including a bicycle/pedestrian trail along the Natomas Main Drainage Canal. As a result, the implementation of the Proposed Project would result in no impact to the pedestrian system.

Since the Low Density Alternative proposes significantly less number of residential units than the Proposed Project, this alternative would add fewer pedestrian trips than the Proposed Project. The pedestrian system impacts caused by this alternative would therefore be *less* than the Proposed Project. In view of this and for the reasons mentioned above (similar to the Proposed Project scenario), the Low Density Alternative would not create any significant impacts to the Pedestrian System under all scenarios.

#### Mitigations (for all scenarios)

Similar to the Proposed Project scenario, no mitigation measures are required.

#### **Transit System Impacts**

#### Impacts (for all scenarios)

As discussed in the Traffic and Circulation Section, Development of the Proposed Project would result in an increase in demand for transit. However, the nominal transit usage generated by the Proposed Project is not anticipated to exceed the capacity of the available/planned transit system in the study area. The implementation of the Proposed Project would result in no impact to the transit system.

Since the Low Density Alternative proposes significantly less number of residential units than the Proposed Project, this alternative would result in to less increase in demand for transit than the Proposed Project. The transit system impacts caused by this alternative would therefore be *less* than the Proposed Project. In view of this and for the reasons mentioned above (similar to the Proposed Project scenario), the Low Density Alternative would not create any significant impacts to the Transit System under all scenarios.

#### Mitigations (for all scenarios)

Similar to the Proposed Project scenario, no mitigation measures are required.

## **CHAPTER 7**

BIBLIOGRAPHY/ REFERENCES

## **Chapter 7 Bibliography and References**

#### PROPOSED PROJECT APPLICANT

Beazer Homes Inc., Northern California Division Contact: Carol Hill, Development Professional 3721 Douglas Boulevard, Suite 100 Roseville, CA 95661 (916) 746-8371 Voice (916) 773-4034 fax www.beazer.com

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Dowling Associates, Inc. 180 Grand Avenue, Suite 250 Oakland, CA 94612 (510) 839-1742 (510) 839-0871 www.dowlinginc.com

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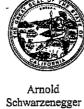
#### PERSONAL COMMUNICATIONS

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- Christensen, Peter, Planner, Sacramento Metropolitan Air Quality Management District. September 30, 2004.
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# APPENDIX A NOTICE OF PREPARATION



## STATE OF CALIFORNIA

## Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Governor

Notice of Preparation

December 14, 2004

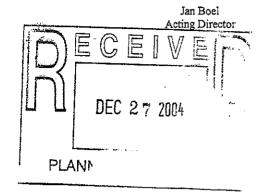
To:

Reviewing Agencies

Re:

River Oaks (P01-132)

SCH# 2004122052



Attached for your review and comment is the Notice of Preparation (NOP) for the River Oaks (P01-132) draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Scott Johnson City of Sacramento 1231 I Street, Room 300 Sacramento, CA 95814

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Associate Planner, State Clearinghouse

Attachments cc: Lead Agency

#### Document Details Report State Clearinghouse Data Base

SCH# 2004122052

Project Title River Oaks (P01-132)
Lead Agency Sacramento, City of

Type NOP Notice of Preparation

Description The project seeks to obtain the necessary entitlements to allow for the development of 654

single-family homes, rezoning the site from Agriculture (A) and Agriculture Planned Unit Development (A-PUD) districts to Single-Family Alternative Planned Unit Development (R-1A-PUD) in order to allow

for the construction of single family homes. The project also proposes to construct support infrastructure, a private community recreation center, +/-9.23 acres of parkland, a trail along the

Natomas Main Drainage Canal, and the creation of a Planned Unit Development.

**Lead Agency Contact** 

Name Scott Johnson
Agency City of Sacramento

Phone (916) 808-5842

email

Address 1231 | Street, Room 300

City Sacramento

Fax

State CA Zip 95814

**Project Location** 

County Sacramento
City Sacramento

Region

Cross Streets W. El Camino Avenue and Orchard Lane

Parcel No. 225-0220-030, -066, -068, -071, -086, -087, -088, -089

Township 9N

Range 4E

Section 22

Base

Proximity to:

Highways 1-80, 1-5

Airports

Railways

Waterways Sacramento River

Schools Lerpy Greene Middle School and Two Rivers Elementary

Land Use Existing Use is Vacant, residentially designated. Existing Zoning is A (Agriculture). The existing

General Plan Land Use of the site is Low Density Residential (4-15 du/na).

Project Issues Traffic/Circulation

Reviewing Resources Agency; Office of Historic Preservation; Reclamation Board; Department of Parks and Agencies Recreation; State Water Resources Control Board, Clean Water Program; Department of Fish and

Game, Region 2; Native American Heritage Commission; California Highway Patrol; Department of Housing and Community Development; Caltrans, District 3; Department of Toxic Substances Control; Regional Water Quality Control Bd., Region 5 (Sacramento); Department of Health Services; Office of

Emergency Services: Department of Conservation

Date Received 12/13/2004 Start of Review 12/13/2004 End of Review 01/11/2005

Note: Blanks in data fields result from insufficient information provided by lead agency.



#### CITY OF SACRAMENTO

DEVELOPMENT SERVICES DEPARTMENT

ROOM 300 SACRAMENTO, CA 95814-2998

Development Services Department 916-264-1909 FAX 916-264-7185

DATE:

**December 13, 2004** 

TO:

Interested Persons

FROM:

Scott Johnson, Assistant Planner

SUBJECT:

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT

REPORT FOR THE RIVER OAKS PARK PROJECT (P01-132)

PUBLIC REVIEW PERIOD: December 13, 2004 through January 20, 2005

#### Introduction

The City of Sacramento Development Services Department is the lead agency for the preparation of an Environmental Impact Report (EIR) for the River Oaks Park project located in the City of Sacramento. Section 15082 of the California Environmental Quality Act (CEQA) states that after the decision to prepare an EIR has been made, the lead agency must prepare an NOP to inform all responsible agencies of that decision. The purpose of the NOP is to provide responsible agencies and interested persons with information on the proposed project and its potential environmental impacts that is sufficient to enable agencies and the public to make a meaningful response regarding the scope and content of the EIR. The document is being prepared in compliance with the California Environmental Quality Act (CEQA).

The EIR will evaluate the potential environmental impacts of the proposed project, and recommend mitigation measures, as required. The EIR will be project-specific, pursuant to Section 15161 of the State CEQA Guidelines. The EIR will provide an evaluation of the environmental effects of the proposed River Oaks Park project focused on the unavoidable traffic related impacts identified in the Initial Study summarized in the attachment to this NOP.

#### **Project Location**

The project site is located in the City of Sacramento's South Natomas Community in Sacramento County, California. The project site is located on parcels of land bounded by Interstate Highway 80 to the north, West El Camino Avenue to the south, the Natomas Main Drainage Canal to the east, and Orchard Lane to the west. The site is located in Section 22 of Township 9 north and Range 4 east on the 7½-minute Sacramento West USGS quadrangle. The project site is comprised of Assessor Parcels Numbers (APN) 225-0220-030, -066, -068, -071, -086, -087, -088, and -089.

#### **Project Description**

The purpose of the project is to obtain the necessary entitlements to allow for the development of 654 single-family homes. The project proposes to rezone the site from the current Agricultural (A) and Agricultural Planned Unit Development (A-PUD) districts to Single Family Alternate Planned Unit Development (R1-A PUD) in order to allow for the construction of single-family homes. The project also

proposes to construct support infrastructure, a community recreation center, ±9.23-acres of parkland, and a trail along the Natomas Main Drainage Canal.

#### **Project Objectives**

The proposed project has the following objectives:

- 1. Develop medium density single-family community close to Downtown Sacramento;
- 2. Develop adequate parkland and a private recreation center to serve the community;
- 3. Create a Planned Unit Development which integrates City of Sacramento Smart Growth goals of integrated walkable neighborhoods and provide recreation and residential opportunities in close proximity to Downtown Sacramento and regional transportation;
- 4. Develop a road and multi-mode trail system that integrates City of Sacramento street standards and meets the objectives of the City of Sacramento Bikeways Master Plan;
- 5. Develop residential uses consistent with the goals of the South Natomas Community Plan.

#### Possible Project Approvals and/or Entitlements Required

- South Natomas Community Plan Amendment
- · Rezoning to Residential
- Planned Unit Development
- Approval of a Tentative Subdivision Map
- Special Permit
- Easement Abandonment
- Statement of Overriding Considerations
- Certification of the EIR

#### **Environmental Effects**

The technical sections of the Draft EIR will describe the existing conditions in the proposed project area and surrounding lands. Relevant federal, State and local laws and regulations, including City of Sacramento General Plan policies, will be summarized in the Draft EIR. The methods and standards of significance used for impacts of the project will be described in the technical section of the EIR, including any assumptions that are important in understanding the conclusions of the analysis. The standards used in determining impact significance are State and federal rules, regulations and laws, and City ordinances, policies, and past practices. The standards will be used as thresholds of significance in determining whether an impact is significant and in identifying the appropriate mitigations. Feasible mitigation measures will be identified where available to reduce impacts to less-than-significant levels. The description of mitigation measures will identify the specific actions to be taken, the timing of the action, and the parties responsible for implementation of the measure, and funding source if known.

At this time, it is anticipated that the EIR technical section will focus on the Transportation and Circulation resource area identified in the Initial Study as having a significant unavoidable impacts.

Transportation and Circulation - The EIR will include the findings of a traffic impact study to be conducted as part of the CEQA process to analyze the potential impacts from the traffic generated by the proposed project, both on a project-specific level and on a cumulative level. The traffic study will evaluate the baseline and planned regional and local transportation network as well as baseline and future traffic conditions. The study will identify traffic loads and capacity of street systems including level of service analysis for critical street segments, intersections, and other facilities. Potential traffic impacts associated with increased volumes and changes in the nature of traffic and circulation patterns will be discussed. Mitigation measures will be developed, if possible and feasible, for all transportation impacts. For roadway impacts, mitigation measures may include roadway widening, land use modification, signalization of stop controlled intersections, and existing signal modification etc. All mitigation measures will reflect City policies and practices, and will consider phasing, feasibility, and the availability of right-of-way. The analysis will include a review of the proposed project's potential impacts on the pedestrian, bicycle, and transit systems.

#### **Alternatives**

The EIR will examine a range of feasible alternatives to the proposed project. A discussion of alternatives that were considered but rejected without full analysis will also be included. At this time, it is anticipated that the alternatives will include:

- No Project Alternative
- Reduced Intensity Alternative

Code Compliant Alternative

Initial Study

Additionally the EIR will include, as an appendix, the Initial Study used to identify the basis for concluding the impacts in the following areas would be less-than-significant, or less-than-significant with mitigation:

- · Land Use and Agriculture
- Population and Housing
- Seismic Hazards, Geology, and Soils
- Hydrology and Water Quality
- Air Quality
- Biological Resources
- Hazards
- Noise
- · Public Services and Utilities
- Aesthetics
- Cultural Resources
- Recreation

Copies of the Initial Study are available at:

City of Sacramento Development Services Department, Environmental Planning Services 1231 I Street, Room 300, Sacramento, CA 95814-2998 (916) 264-7185

**Submitting Comments** 

To ensure that the full range of project issues of interest to responsible government agencies and the public are addressed, comments and suggestions are invited from all interested parties. Written comments or questions concerning the EIR for the project should be directed to the following address by 5:00 p.m. on Thursday, January 20, 2005:

City of Sacramento Development Services Department.
Attn: Scott Johnson
1231 I Street, Room 300
Sacramento, CA 95814
(916) 264-5842
(916) 264-7185 fax
srjohnson@cityofsacramento.org

All comments must include full name and address in order for staff to respond appropriately.

# APPENDIX B COMMENTS ON NOTICE OF PREPARATION

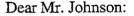
#### DEPARTMENT OF TRANSPORTATION

DISTRICT 3 – SACRAMENTO AREA OFFICE VENTURE OAKS, MS 15 P. O. BOX 942874 SACRAMENTO, CA 94274-0001 PHONE (916) 274-0614 FAX (916) 274-0648 TTY (530) 741-4509

January 19, 2005

05SAC0014 03-SAC-80 PM 1.355 River Oaks (P01-132) Notice of Preparation SCH#2004122052

Mr. Scott Johnson City of Sacramento Planning Division 1231 I Street, Room 300 Sacramento, CA 95814



Thank you for the further opportunity to review and comment on the River Oaks project. Our comments are as follows:

- After reviewing several project applications and revisions we notice that the size of the residential project still specifies 654 single family homes for this development in its current form. Our previous comments in our letters of December 8, 2004, July 19, 2004 and April 9, 2004 (copies enclosed) remain valid with the most recently proposed project.
- From your phone conversation with Ken Champion of our staff, you confirmed that a Traffic Impact Study (TIS) will be done for this development. We request early consultation regarding this study to ensure that Caltrans concerns will be evaluated.

We look forward to working with you on the traffic study. Please provide us with any further information regarding this project. If you have any questions regarding these comments, please contact Ken Champion at (916) 274-0615.

Sincerely,

KATHERINE EASTHAM, Chief

Office of Transportation Planning - Southwest

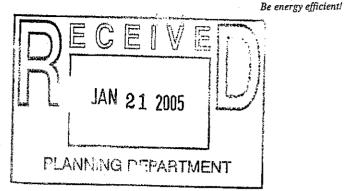
Enclosures

c: Joyce Horizumi, Sacramento County DERA Scott Morgan, State Clearinghouse

"Caltrans improves mobility across California"







DEPARTMENT OF TRANSPORTATION

DISTRICT 3 – SACRAMENTO AREA OFFICE VENTURE OAKS, MS 15 P. O. BOX 942874 SACRAMENTO, CA 94274-0001 PHONE (916) 274-0614 FAX (916) 274-0648 TTY (530) 741-4509



Flex your power!
Be energy efficient!

December 8, 2004

Mr. Greg Bitter City of Sacramento Planning Division 1231 I Street, Room 300 Sacramento, CA 95814

Dear Mr. Bitter:

Thank you for the opportunity to review and comment on the revised River Oaks project plans. Our comments are as follows:

- Although it appears the office portion of the project has been removed from this residential
  development, the trip generation still needs to be assessed. Our previous comments in our
  letter of April 9, 2004 (copy enclosed) remain valid with the most recently proposed project
  changes.
- The change from a mixed-use project to purely residential will exacerbate the need for vehicular commuting.
- The Department supports the livable community concept of communities having a center focus that combines commercial, civic, cultural, and recreational uses. Currently the neighborhood parks are planned for the northwest and northeast corners of the River Oaks subdivision. We encourage the City of Sacramento to locate the parks in centralized locations so as to allow more people in the subdivision to easily access the parks.
- Residential projects should be designed to encourage basic livability concepts, including but not limited to:
  - Community size should be designed so that housing, jobs, daily needs and other activities are within easy walking/biking distance of each other.
  - The design and circulation network for the project should be planned to encourage and facilitate the use of alternative transportation modes, including bicycles, transit, and pedestrian.

Mr. Greg Bitter December 8, 2004 Page 2

We applaud the City of Sacramento for providing for a diversity of housing types, in this
case cluster housing, to enable citizens from a wide range of economic levels and age groups
to live within its boundary.

Please provide the requested traffic study and any further information regarding this project. If you have any questions regarding these comments, please contact Ken Champion at (916) 274-0615.

Sincerely,

ORIGINAL SIGNED BY:

KATHERINE EASTHAM, Chief Office of Transportation Planning - Southwest

**Enclosures** 

c: Joyce Horizumi, Sacramento County DERA

#### DEPARTMENT OF TRANSPORTATION

DISTRICT 3 – SACRAMENTO AREA OFFICE VENTURE OAKS, MS 15 P. O. BOX 942874 SACRAMENTO, CA 94274-0001 PHONE (916) 274-0614 FAX (916) 274-0648 TTY (530) 741-4509



Flex your power! Be energy efficient!

July 19, 2004

04SAC0096 03-SAC-80 PM 1.355 River Oaks (P01-132) Application

Mr. Greg Bitter City of Sacramento Planning Division 1231 I Street, Room 300 Sacramento, CA 95814

Dear Mr. Bitter:

Thank you for the opportunity to review and comment on the revised River Oaks project plans. Our comments are as follows:

 Our previous comments in our letter of April 9, 2004 (copy enclosed) are still valid with the proposed project changes.

If you have any questions regarding these comments, please contact Ken Champion at (916) 274-0615.

Sincerely,

### ORIGINAL SIGNED BY:

KATHERINE EASTHAM, Chief Office of Transportation Planning - Southwest

**Enclosures** 

c: Joyce Horizumi, Sacramento County DERA

#### DEPARTMENT OF TRANSPORTATION

DISTRICT 3 – SACRAMENTO AREA OFFICE VENTURE OAKS, MS 15 P. O. BOX 942874 SACRAMENTO, CA 94274-0001 PHONE (916) 274-0638 FAX (916) 274-0648 TTY (530) 741-4509



Flex your power!

Be energy efficient!

April 9, 2004

04SAC0048 03SAC-80 PM 1.355 River Oaks Application (P01-132)

Mr. Greg Bitter City of Sacramento Planning Division 1231 I Street, Room 300 Sacramento, CA 95814

Dear Mr. Bitter:

Thank you for the opportunity to review and comment on the River Oaks project. Our comments are as follows:

- This project falls within the purview of the South Natomas Community Plan (SNCP). Any specific development which is proposed, and any change in land use, which would result in or allow increased or redistributed trips may require an update to the South Natomas Community Plan traffic study. For significant short-term traffic impacts, a project-specific traffic study may be required. Each proposed development or land use change should be examined for variances from volumes outlined in the SNCP which result in new or increased impacts or significant short term traffic impacts. Fair share contributions for mitigation may have to be re-evaluated.
- The Interstate 80 (I-80)/West El Camino Avenue Interchange is referenced in a November 1995
  Cooperative Agreement executed for assessing when monitored improvements are needed due to
  the build out of the North Natomas Community Plan area. However, added traffic contributed
  by amended land use developments in South Natomas should also provide funding for identified
  interchange improvements.
- A Traffic Impact Study (TIS) should be prepared. This mixed-use residential and office project, located easterly of the I-80/West El Camino Avenue Interchange, will generate a significant number of vehicular trips that will impact the interchange. The percentage of generated traffic that may impact the I-5/West El Camino Interchange should also be evaluated. The complete Caltrans TIS guidelines are available at the following website: <a href="http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/">http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/</a>. The TIS should incorporate the following scenarios:

Existing conditions without the project
Existing conditions plus the project
Cumulative conditions (without the project)
Cumulative conditions (with project build-out)

- The traffic analysis should provide a Level of Service (LOS) analysis for the I-80/West El Camino Avenue and I-5/West El Camino Avenue Interchange freeway ramps and ramp terminal intersections. A merge/diverge analysis should be performed for the freeway and ramp junctions and all analysis should be based on AM and PM peak hour volumes. The analysis should include the (individual, not averaged) LOS and traffic volumes applicable to all intersection road approaches and turn movements. The procedures contained in the Year 2000 Highway Capacity Manual should also be used as a guide for the traffic study.
- Mitigation measures should be identified where the project would have a significant impact. Caltrans considers the following to be significant impacts:
  - Off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway.
  - Vehicle queues at intersections that exceed existing lane storage.
  - Project traffic impacts that cause any ramp's merge/diverge Level of Service (LOS) to be worse than the freeway's LOS.
  - Project impacts that cause the freeway or intersection LOS to deteriorate beyond LOS E for freeway and LOS D for intersections. (If the LOS is already "E" or "F", then a quantitative measure of increased queue lengths and delay should be used to determine appropriate mitigation measures.)
- Traffic generated from the proposed project will contribute to cumulative impacts to the I-80/West El Camino Avenue and I-5/West El Camino Avenue Interchanges. Interchange improvements (ie. signalization and other ramp terminal intersection modifications, ramp widening and metering, possible closed circuit television monitoring traffic surveillance items, and auxiliary lanes) should be investigated as mitigation measures to maintain adequate traffic operations in the vicinity of this project. Fair share mitigation fees for I-80 HOV lanes in the vicinity of the I-5/I-80 Junction should also be considered.
- The analysis of future traffic impacts should be based on a 20 year planning horizon.
- Future transportation systems assumed for cumulative conditions should only include those improvements in the Sacramento Area Council of Government's 2002 Metropolitan Transportation Plan.
- A Traffic Management Plan (TMP) should be prepared and submitted for Caltrans review to minimize traffic impacts to Interstates 80 and 5 during construction of the proposed project. The TMP should discuss the expected dates and duration of construction, as well as traffic mitigation measures. We recommend that to the extent possible, the applicant should limit truck trips during morning and evening peak traffic periods (6-9 AM and 3-6 PM) to avoid exacerbating traffic congestion. TMP Guidelines are enclosed for your review in preparing the plan.

- Recent legislation amended the California Environmental Quality Act (CEQA) and Public Resources Code Sections 21081.4, 21081.6 and 21081.7 to mandate lead agencies under CEQA provide the California Department of Transportation with information on transportation related mitigation monitoring measures for projects that are of statewide, regional, or area-wide significance. The enclosed "Guidelines for Submitting Transportation Information from a Reporting or Monitoring Program to the Department of Transportation" discuss the scope, purpose and legal requirements for mitigation monitoring reporting and submittal, specify the generic content for reports, and explain procedures for the timing, certification and submittal of the required reports. The River Oaks project is of sufficient size to have impacts that are of regional or area wide significance. Therefore, the enclosed Mitigation Monitoring Certification Checklist form should be completed and submitted to our office when the mitigation measures are approved, and again when they are completed.
- Any runoff that comes from the proposed development must not contribute a contaminant load to storm waters handled by the State, for example oils, grease, sand, sediment, debris. All runoff that enters the State right-of-way must meet Regional Water Quality Control Board (RWQCB) standards for clean water.
- Any increases of discharge into the Interstate 80 drainage system must be mitigated. Existing
  drainage patterns must be perpetuated or improved within the State right-of-way. Pre and postproject discharge information should be supplied for Caltrans review.
- The incorporation of environmental Best Management Practices (BMP), such as retention ponds, infiltration trenches, and other drainage improvements may be sufficient to mitigate any adverse drainage impacts from the proposed development.
- Any mitigation, temporary signage, or other work conducted within State right-of-way will require an encroachment permit. For permit assistance, please contact Bruce Capaul at (530) 741-4403.

Please provide our office with a copy of the draft TIS for this project. If a TIS is not prepared, please provide an explanation of why it was not considered necessary. If you have any questions regarding these comments, please contact Ken Champion at (916) 274-0615.

Sincerely,

ORIGINAL SIGNED BY:

JEFFREY PULVERMAN, Chief Office of Regional Planning

Enclosures

c: Joyce Horizumi, Sacramento County DERA

#### DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836 SACRAMENTO, CA 94236-0001 (916) 653-5791

> Scott Johnson City of Sacramento 1231 | Street, Room 300 Sacramento, California 95814

December: River Oaks Park Project (P01-132) State Clearinghouse (SCH) Number: 2004122052PLANNING DEPARTMENT

Staff for The Department of Water Resources has reviewed the Notice of Preparation provided through the SCH and provides the following comments on behalf of the State Reclamation Board:

A portion of the proposed Project (a multi-mode trail along the Natomas Main Drainage Canal) appears to impact a project levee over which The Reclamation Board has jurisdiction and exercises authority. Section 8710 of the California Water Code requires that a Board permit must be obtained prior to start of any work, including excavation and construction activities, within floodways, levees, and 10 feet landward of the landside levee toes. A list of streams regulated by the Board is contained in the California Code of Regulations, Title 23, Section 112.

Section 8(b)(2) of the Regulations states that applications for permits submitted to the Board must include a completed environmental questionnaire that accompanies the application and a copy of any environmental documents if they are prepared for the project. For any foreseeable significant environmental impacts, mitigation for such impacts shall be proposed. Applications are reviewed for compliance with the California Environmental Quality Act.

Section 8(b)(4) of the Regulations states that additional information, such as geotechnical exploration, soil testing, hydraulic or sediment transport studies, biological surveys, environmental surveys and other analyses may be required at any time prior to Board action on the application.

For further information on where to send the documentation, please contact me at (916) 574-0373 or ddjones@water.ca.gov.

**Environmental Review Committee** 

Governor's Office of Planning and Research CC: State Clearinghouse 1400 Tenth Street, Suite 222 Sacramento, California 95814



January 20, 2005

Scott Johnson
Development Services Department
City of Sacramento
1231 I Street, Room 300
Sacramento, CA 95814

RE: Notice of preparation of a DEIR for the River Oaks project (P01-132)

Dear Mr. Johnson:

The River Oaks Community Association (ROCA) has reviewed the Notice of Preparation (NOP) for the proposed River Oaks project. According to the NOP, "it is anticipated that the EIR technical section will focus on the Transportation and Circulation resource area identified in the Initial Study as having . . . significant unavoidable impacts." ROCA believes that the DEIR must focus on other issues where there may be significant environmental impact. ROCA also suggests that it is helpful to review Sacramento Protection League, et al. v. City Council of the City of Sacramento, et al. to understand the number of issues that have been overlooked in environmental documents prepared for other subdivisions in the area.

With regard to the **transportation and circulation** issue, the NOP notes that for "roadway impacts, mitigation measures may include road widening, land use modification, signalization of stop controlled intersections, and existing signal modification etc." Because the South Natomas Community Plan calls for one auto/bicycle bridge and two bicycle bridges over the canal, as well as bicycle bridge over I-80 (pg. 32), we believe that these community plan requirements must be part of the project and included in the environmental analysis. We therefore urge that these community plan components be included in the **initial study circulation system section** (pgs. 15 to 17) and the **initial study project phasing section** (pg. 18 to 19).

The NOP indicates that the alternatives to be considered include the no project alternative, reduced intensity alternative, and code compliant alternative. Because a past proposal for this site included offices along the freeway (which is consistent with other parts of north and south Natomas), ROCA believes that this alternative should be considered in the DEIR.

According to the initial study project site description for the project (pg. 8), "All buildings, foundations, and equipment related to agricultural use at the site were removed

from the site in summer and fall 2004." Unfortunately, a number of trees were also removed from the site, including trees that we understand contained Swainson's hawk nesting sites. Many trees (that have been removed) can be seen in Figure 1.3 (pg. 7) and Figure 1.4 (pg. 9) of the initial study. We are very concerned that these trees were removed in order to change the baseline conditions at the site and thereby further limit necessary environmental review for the project.

The environmental checklist portion of the initial study fails to adequately specify the water quality impacts and mitigation measures. For example, the initial study (pg. 37) notes that the general permit "requires the permittee to employ 'best management practices' (BMPs) before, during, and after construction." While specific construction BMPs are included (pg. 38), none are included for post construction BMPs. Therefore, the proposed project may result in a significant impact on water quality. Please note that previous environmental documents for this area determined that surface water and stormwater runoff from residential development will have a significant adverse impact on water quality. Moreover, these environmental documents provide evidence that water quality issues would be addressed on a site-specific basis, and that the city's planning division must require project applicants to implement BMPs and BAT for drainage from project sites. The DEIR for the proposed project must therefore include BMPs and BAT for stormwater runoff.

The environmental checklist portion of the initial study relating to mitigation measures for air quality (pgs. 51 to 53) provides credits for mixed uses that are within ¼ mile of the site and for bicycle and pedestrian paths connecting residential, commercial, and office uses. These credits are appropriate only if the proposed project includes the bicycle bridges identified in the community plan. A credit is also included for a development pattern that eliminates physical barriers such as walls and berms. This credit cannot be included if the proposed project contains a wall along West El Camino Avenue. Therefore, the project may have a significant impact on air quality. This section should also contain a more detailed discussion of exposure of sensitive receptors to pollutants since homes and parks are planned adjacent to the freeway.

The environmental checklist **transportation/circulation** section (pgs. 54 to 57) must identify a potentially significant impact for pedestrians and bicyclists, as well as conflicts with adopted supporting policies, if the proposed project does not include the bridges specified in the community plan. There may also be significant impacts on public transportation if buses will not be able to serve the proposed project without the required auto/bicycle bridge identified in the community plan.

The biological resources section of the environmental checklist (pgs. 57 to 72) contain various mitigation measures, including mitigation measures relating to the Swainson's hawk habitat, nests, and nest trees. However, as noted above, the project site has recently been altered by the removal of a number of trees and other changes to the site. This is a significant impact on these important resources and must be mitigated. We are very disturbed that the project applicant and city have allowed this to occur and we want to know how the city intends to address this issue.

The noise section of the environmental checklist (pgs. 83 to 92) indicates that noise along I-80 and West El Camino exceeds the city's noise level standards, and this impact is considered significant (pg. 89). One of the mitigation measures provides that noise barriers "should" be constructed at the I-80 and West El Camino Avenue right of way to reduce future noise to more acceptable levels. The initial study then concludes that noise levels at the project site will be at or below city thresholds with mitigation measures. However, the land uses could be changed on West El Camino to address noise impacts without walls and this should be addressed in the DEIR. Also, we are concerned that there may be additional impacts from such a wall that should also be addressed in the DEIR.

The public services section of the environmental checklist (pgs. 92 to 95) notes that the community plan "describes the existing fire station as a temporary facility and identifies the northeast side of West El Camino Avenue next to the Main Drainage Canal... as the location for a new fire station." The community plan also requires a facilities benefit assessment district to fund public facilities, including the fire station (pg. 51). Therefore, without information regarding the status of the assessment district to finance construction of the fire station, the proposed project may have a significant impact on fire protection.

The aesthetics, light and glare section of the environmental checklist (pgs. 104 to 107) notes that the applicant "is proposing a combination of sound wall and landscaped berm to shield the development from visible, and sound related impacts. A wall along West El Camino Avenue will have a demonstrable negative aesthetic impact if it is included in the proposed project.

It is noteworthy that the initial study provides that certain mitigation measures "should" be implemented, rather than "shall" be implemented. There may therefore be many significant impacts not noted about due to this weakness.

ROCA will review the DEIR when it is circulated and is likely to have additional comments on the DEIR and the initial study that will be part of the DEIR. We also look forward to reviewing the mitigation monitoring plan to ensure that mitigation measures can be properly implemented.

If you have questions about the contents of this letter, please contact Randy Pestor, ROCA Board Member, at 324-0894 or via email at <a href="mailto:sacriver@hotmail.com">sacriver@hotmail.com</a>.

Sincerely,

Rachel Perry President

DEC 27 2004

To: City of Sacramento, Development Services Department From: Lisa Plummer, 170 Unity Circle, Sacramento, CA 95833 RE: EIR Questions for the River Oaks Park Project

#### Five separate questions:

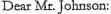
- (1) What is the expected environmental impact of this project on air quality?
- (2) How much more traffic congestion is expected?
- (3) Will a bus-line be added near the project to alleviate reliance on solo commuting, and, if so, what routes will be included?
- (4) What percentile of the project site will be committed to trails and/or parks?
- (5) Has the city contemplated the ever-increasing concern of building more residential homes in "shaky" flood regions, and, if so, please comment with regard to that query and whether the Army Corps of Engineers has weighed in on this issue or project.



January 19, 2005

City of Sacramento, Development Services Department Attn: Scott Johnson 1231 I Street, Room #300 Sacramento, CA 95814

Re: NOP for River Oaks Park (P01-132)



The South Natomas TMA<sup>TM</sup> appreciates the opportunity to submit items to be addressed by the project's Environmental Impact Report. We are concerned about how this project will impact unresolved traffic circulation, speed and safety issues along Gateway Oaks Drive.

This project will increase the traffic volumes and exacerbate related circulation and safety issues on Gateway Oaks south of West El Camino due to the existing conditions of:

- An incomplete interchange at I-5 and West El Camino,
- West El Camino and I-80 interchange's strained ability to handle current traffic volumes, and
- The narrowing eastbound lanes of I-80 at the I-5 interchange, creating a "bottleneck."

These existing traffic limitations encourage motorists to use the Garden Highway via Gateway Oaks Drive to:

- Travel northbound on I-5,
- More easily access I-80 or
- "Jump the queue" created by I-80's bottleneck just west of I-5.

As traffic volumes continue to increase, there are growing circulation issues at uncontrolled intersections such as River Plaza Drive, and excessive vehicle speeds on Gateway Oaks create a hostile pedestrian environment for those trying to cross the street/access Regional Transit bus stops. The traffic generated by a project of this magnitude will undoubtedly escalate these existing circulation problems, and potentially create other issues at yet unidentified locations.

This project heightens the need for a thorough evaluation of the existing and potential traffic and circulation issues; a traffic study is necessary to determine the magnitude of the impacts. Mitigation should be assessed to off-set and resolve the resulting traffic impacts. Mitigation measures such as master planning Gateway Oaks Drive can identify feasible strategies to improve pedestrian safety, accessibility and connectivity, as well as reduce vehicle speeds.

Feel free to contact me at (916) 646-0928 if have any questions or need clarification. We are available to assist City staff and the project applicant to identify and refine mitigation measures.

enicercy,

Deborah K. Maus, CAE

Executive Director

PLANNING DEPARTMENT

From:

David Justice <david@justiceco.com> <srjohnson@citvofsacramento.org>

To: Date:

1/19/05 11:15AM

Subject:

P01-132 RIVER OAKS PARK PROJECT

P01-132 RIVER OAKS PARK PROJECT ("PROJECT")
COMMENTS ON PREPARATION OF EIR

Mr. Scott Johnson, Assistant Planner City of Sacramento Development Services Department 1231 | Street, Room 300 Sacramento, CA 95814-2998

Dear Scott,

I am the general partner of WELCAM 80 Venture, developer/owner of the properties collectively known as "Tomato Patch" at the S.E. corner of El Centro Road and W. El Camino (APN's 225-1020-03 thru 11) and zoned Travel Commercial ( "WELCAM"). I am also President of the TOMATO PATCH OWNERS ASSOCIATION (TPOA) that manages the common area services and private utilities for the member properties. TPOA properties, inclusing WELCAM, are within the County of Sacramento but are under agreement to support actions in support of annexation to the City of Sacramento. TPOA / WELCAM is comprised of the following properties and respective uses:

Natomas Self Storage - Self Storage Chevron Service Station/Subway Restaurant Burger King Restaurant Super 8 Motel - 52 rooms Marriott Fairfield Inn & Suites - 93 rooms (under construction) Restaurant site - undeveloped 2 Development sites - temporary drainage attenuation basins - undeveloped

TPOA currently provides private onsite drainage pumping and temporary drainage storage within the development and utilizes the RD 1000 ditch system for storm drainage discharge. All the parcels are connected to public sewer system owned and maintained by the County of Sacramento. Public water supply and fire protection are provided by the City of Sacramento through written agreement with the City. TPOA paid to the County, some twelve years ago, a traffic impact / fair-share improvement fee of \$33,000 towards the improvement of the El Centro Road / W. El Camino intersection improvement and signalization. These moneys have been held by the County and have never been applied to ANY intersection improvements to date. The existing parcels/businesses are further provided utility services by SMUD, PG&E, & SBC. Public safety is provided by City of Sacramento (FIre), County of Sacramento (Sheriff) and Calif highway Patrol (Traffic).

In the development of the EIR for the PROJECT it is imperative that the public utility and transportation needs of TPOA / WELCAM be evaluated in the context of extending and/or providing services to the PROJECT. This will require specific focus on the storm drainage needs of these

properties together with the adjacent 49er truck service center. The drainage service provided by RD1000 is wholly inadequate placing a serious burden on TPOA / WELCAM to provide on-site storm water storage and private pumping. The drainage need of this area were neglected by the City in the development of the drainage plan serving the western Natomas development area and an adequate public drainage system for this area is long overdue.

Further, CITY and COUNTY commerce, residents and visitors utilize the under-improved intersection at El Centro and W. El Camino Avenues and the outdated W. El Camino / I-80 freeway overpass and this overburdened roadway system is in dire need of overhaul and updating. Added traffic impacts from the PROJECT will seriously exacerbate the inadequate, overburdened facilities.

TPOA and WELCAM will actively support the continued development of the area, including the PROJECT, AND the development of lands on the west side of El Centro Road. We will, however, aggressively evaluate development plans proposed by the developers, City and County to ensure that our properties are not continually neglected by public planners and isolated from needed, enhanced public services, especially with regard to public storm drainage and roadway capacity.

If you wish to discuss these issues directly or require any support information for the conduct of your studies, do not hesitate to contact me directly. My cell phone is 916-870-8802 and my email is david@justiceco.com.

Sincerely,

TOMATO PATCH OWNERS ASSOCIATION

WELCAM 80 Venture

David A. Justice, President Partner

David A. Justice, General

CC:

Laurie E. Davis <ldavis@californiacontractlaw.com>



January 19, 2005

Mr. Scott Johnson City of Sacramento Development Services Department 1231 I Street, Suite 300 Sacramento, CA 95814

RE:

Notice of Preparation of a Draft EIR for the River Oaks Park Project, P01-132

SAC200400116C

Dear Mr. Johnson:

Thank you for the Notice of Preparation for the draft EIR for the River Oaks Park Project. I will be the point person for review of this project.

We would expect the EIR for the project will contain an analysis of the air quality impacts for this project from both the short term impacts (construction) and long term impacts (operations). Please include copies of that analysis with the copy of the draft EIR sent to the District for review.

If construction impacts are found to be significant, we would expect the inclusion of the District standard construction mitigation as a condition of approval of the project.

If the operational impacts are found to be significant, we recommend the City require the proponent to create an air quality mitigation plan designed to reduce those impacts by 15%. This measure is a reasonable, feasible mitigation for projects which exceed District thresholds of significance. We would expect to work with the proponent on this plan prior to the certification of the EIR. In that way, the approved plan would be part of the EIR as it is certified.

If you have any questions regarding these comments, please contact me at 916-874-4885.

Sincerely,

Jeane Borkenhagen Mobile Source Division

CC: Ron Maertz, Mobile Source Division

Jeane Bor herbiger



January 21, 2005 E225.000

10545 Armstrong Avenue

Mather

California

95655

Tele: [916] 876-6000

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City of Sacramento Planning Division

1231 I Street, Room 300

Sacramento, CA 95814-2998

Dear Mr. Johnson:

Subject:

Notice of Preparation of a Draft Environmental Impact

Report for The River Oaks Park Project (P01-132)

APN: 225-0220-030, -066, -068, -071, -086, -087, -088, -

089.

Control No. P01-132

Both the County Sanitation District 1 (CSD-1) and the Sacramento Regional County Sanitation District (SRCSD) reviewed the subject documents and have the following comments.

We expect that if the project is subject to currently established policies, ordinances, fees, and to conditions of approval, that we will propose after review of entitlement application documents, then mitigation measures within the Environmental Impact Report (EIR) will adequately address the sewage aspects of the project and we anticipate a less than significant impact to the sewage facilities.

CSD-1 and SRCSD do have projects proposed in their Master Plans within the subject area and lying beneath the proposed Orchard Lane and western project boundary. Additionally, sewer facilities exist in the project area. The EIR should address coordination of design and construction of the redevelopment projects with both Districts to insure continuous service and protection of sewage facilities.

Sincerely,

Wendy Haggard, P.E.

Weedy Hayand

Department of Water Quality

Development Services

WH/JRO: cc

cc: Maria Cablao

Steve Hong (Infrastructure Finance Section)

johnson012105.ltr.doc

### APPENDIX C RIVER OAKS PROJECT INITIAL STUDY

## RIVER OAKS PARK PROJECT - PO1-132 INITIAL STUDY

This Initial Study has been prepared for the Development Services Department, Office of Environmental Affairs, 1231 I Street, Room 300, Sacramento, CA 95814, 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, Title 63.

This Initial Study is organized into the following sections:

**SECTION I - BACKGROUND:** Page #2 - Provides summary background information about the project name, location, sponsor, when the Initial Study was completed, and a project introduction.

**SECTION II - PROJECT DESCRIPTION:** Page #4 - Includes a detailed description of the Proposed Project.

**SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION:** Page # 25 - 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 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**: Page # 119 Identifies which environmental factors were determined in this Initial Study to have either a "Potentially Significant Impact Unless Mitigated" or a "Less-than-significant Impact" as indicated in the Environmental Checklist.

**SECTION V - DETERMINATION:** Page #120 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.

#### SECTION I BACKGROUND

#### FILE NUMBER, PROJECT NAME:

#P01-132, River Oaks Park Project

#### **PROJECT LOCATION:**

The project site is located in the City of Sacramento's South Natomas Community in Sacramento County, California. The project site is located on parcels of land bounded by Interstate Highway 80 to the north, West El Camino Avenue to the south, the Natomas Main Drainage Canal to the east, and Orchard Lane to the west.

#### **PROJECT SPONSOR AND CONTACT PERSON:**

Beazer Homes Inc., Northern California Division Contact: Carol Hill, Development Professional 3721 Douglas Boulevard, Suite 100 Roseville, CA 95661 (916) 746-8371 Voice (916) 773-4034 fax www.beazer.com

DATE INITIAL STUDY COMPLETED: DECEMBER 13, 2004, Revisions Completed May 2005

#### INTRODUCTION

Beazer Homes Inc. has submitted a development application to the City of Sacramento (City) for the River Oaks Park project located on an ±80.33-acre site approximately one mile northeast of the City's downtown. The project proposes to amend City land use plans to allow for the construction of new homes, roads, two parks, trails, recreation facilities, a community pool, and a clubhouse. The project is located within the City's jurisdiction and the City is the lead agency pursuant to the California Environmental Quality Act (CEQA) responsible for conducting an environmental review of the proposal.

The purpose of this Initial Study, in conformance with CEQA Guidelines Section 15060, is to analyze the proposed project and assesses the significance of its potential effects on the environment. Pursuant to CEQA Guidelines Section 15080, the City has determined that the project's potentially significant environmental effects on transportation traffic and circulation as identified in this Initial Study, and Guidelines Section 15064, will necessitate the preparation of an Environmental Impact Report. All other potential project related impacts to the environmental areas identified in this Initial Study are reduced to less-than-significant levels with mitigation.

The mitigation measures identified herein will be adopted as conditions of project approval by the City and shall be implemented prior to and during development of the project using a Mitigation Monitoring Program (MMRP) compliant with CEQA Guidelines Section 15097. The MMRP

### RIVER OAKS PARK INITIAL STUDY

prepared for this project identifies the timing, funding, and parties responsible for monitoring the implementation of the mitigation measures for 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 time limits mandated by state law, your responses must be sent at the earliest possible date, but no later than the 30-day review period ending **January 20, 2005**. Please send written comments to:

Scott Johnson, Assistant Planner Environmental Planning Services 1231 I Street, Suite 300 Sacramento, CA 95814 (916) 808-5842 Office (916) 264-5328 Fax

srjohnson@cityofsacramento.org

#### **SECTION II - PROJECT DESCRIPTION**

#### **PROJECT LOCATION**

Beazer Homes Inc. is proposing the River Oaks Park project in the South Natomas Community approximately one mile northeast of the Sacramento River in the City of Sacramento, California. The project is located on parcels of land bounded by Interstate Highway 80 to the north, West El Camino Avenue to the south, the Natomas Main Drainage Canal (Canal) to the east, and Orchard Lane to the west. *Figure 1.1* shows the location of the proposed project in relation to the Sacramento region.

The site is located in Section 22 of Township 9 north and Range 4 east on the 7 ½-minute Sacramento West USGS quadrangle. The project site is comprised of Assessor Parcels Numbers (APN) 225-0220-030, -066, -068, -071, -086, -087, -088, and -089. The properties are located at an approximate elevation of 15 feet above mean sea level. *Figure 1.2* shows the Assessor parcels for the project site.

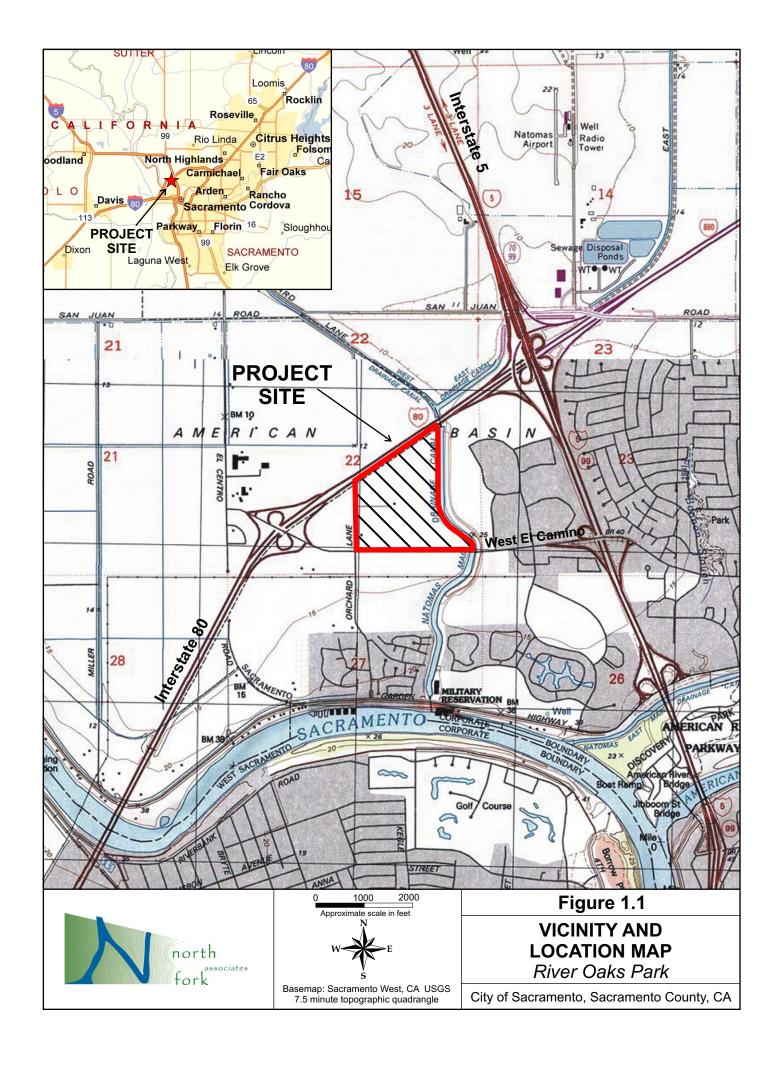
#### **EXISTING CONDITIONS**

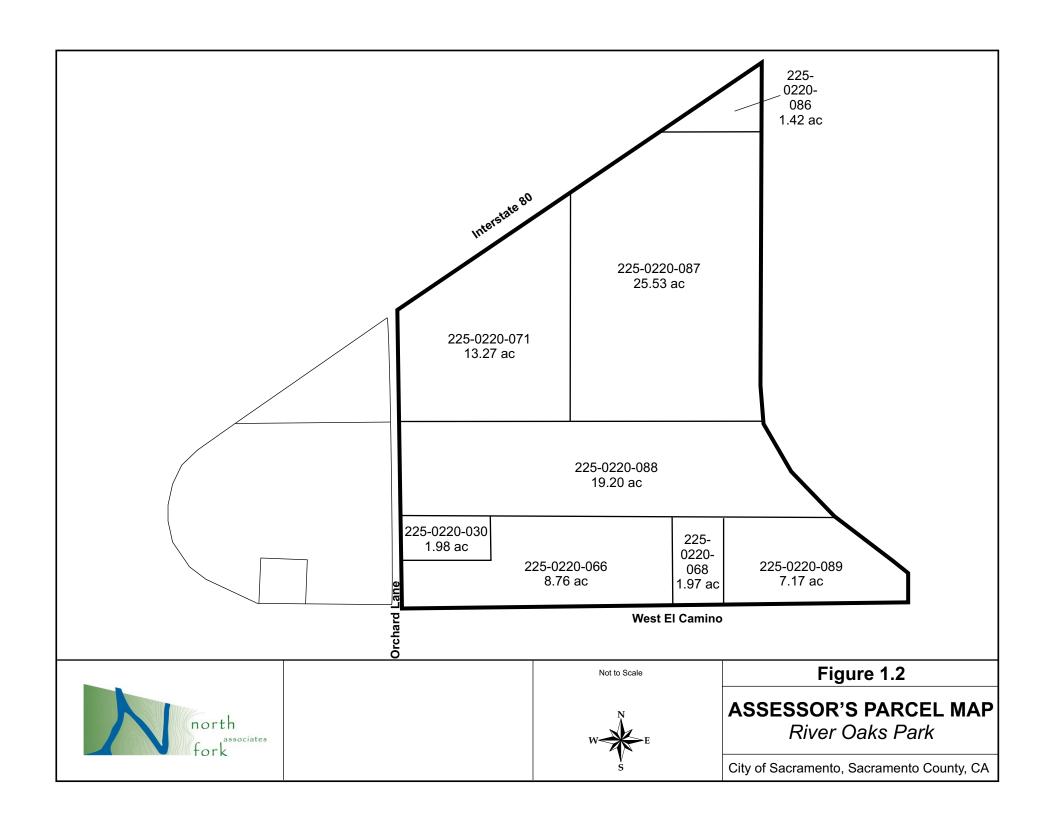
#### **Project Site**

The project site is in the planning areas of the *City of Sacramento General Plan*, the *South Natomas Community Plan*, and the *Natomas Basin Habitat Conservation Plan*. The project site is located in an area transitioning from agricultural use to urban uses at the northwest edge of the City of Sacramento's South Natomas planning area. The proposed project is also located in the City's Willowcreek Assessment District No. 96-01. The district was formed by the City of Sacramento in 1997 to assess new development for the cost of infrastructure needed to serve it. As stated above, the project is located in the planning area of the *Natomas Basin Habitat Conservation Plan*, which assesses fees for urban development and establishes a mitigation process for acquiring, preserving, and restoring habitat areas in the Natomas Basin.

Currently, the project site is vacant and fallow land, which until recently was the location of a single-family home and farm. The site had several large portable storage containers and sheds located near the residence and vehicles, truck trailers, produce, and equipment were stored there. Water and wastewater disposal were provided by a well and septic system located next to the residence. All buildings were removed from the site in summer and fall of 2004. *Figure 1.3* is an aerial photo of the project taken in July of 2003, in which the former uses at the site are visible.

The Orchard Lane and West El Camino Avenue intersection provide primary access to the site. The pavement ends where Orchard Lane enters the site and becomes dirt driveways that serve as access to the rest of the property. Access to the site is also provided by the gated levee dirt road which runs along the east side of the property.







Until recently, a majority of the land at the site was seasonally active with production of a variety of crop types including corn, peppers, tomatoes, and melons. The topography is generally flat and the site is graded and trenched annually for crop irrigation, and drainage. Along the project side of the Canal, a levee topped by a dirt road runs the length of the site. A strip of riparian vegetation between the levee road and the Canal runs the length of the Canal side of the levee.

The site is drained by a trench located along the east side of Orchard Lane that exits the site via a storm drain pipe running south under Interstate 80. Sewer and water lines run along the West El Camino Avenue. Power lines run along the site frontage on West El Camino Avenue, along the west side of Orchard Lane, and across the Canal to bisect the site along the dirt road next to the equipment storage area (former residence). Power lines are indicated on the aerial photograph in *Figure 1.3*.

Figure 1.3 indicates the location of former residences. Two locations where residences formerly existed are clearly marked by trees. The first location is next to West El Camino Avenue and the other near the center of the project site. All buildings, foundations, and equipment related to agricultural use at the site were removed from the site in summer and fall 2004.

#### **Adjacent Properties**

The north side of the property has a boundary with Interstate 80. Land uses immediately adjacent to the project site include residential development south along West El Camino Avenue and east across the Canal. An office park with three commercial office buildings and frontage to both Interstate 80 and Interstate 5 is located across the Canal northeast of the project site. Barandas Park is located across the Canal along the north side of West El Camino Avenue. The land immediately west and north across Interstate 80 from the project site is in crop production. To the west is vacant commercial land. The West El Camino Avenue interchange with Interstate 80 is adjacent to that property. A truck stop, fueling station, and restaurant are located across the overpass and are visible from the project site. Figure 1.4 indicates uses on and adjacent to the site.

#### **Land Use Designations**

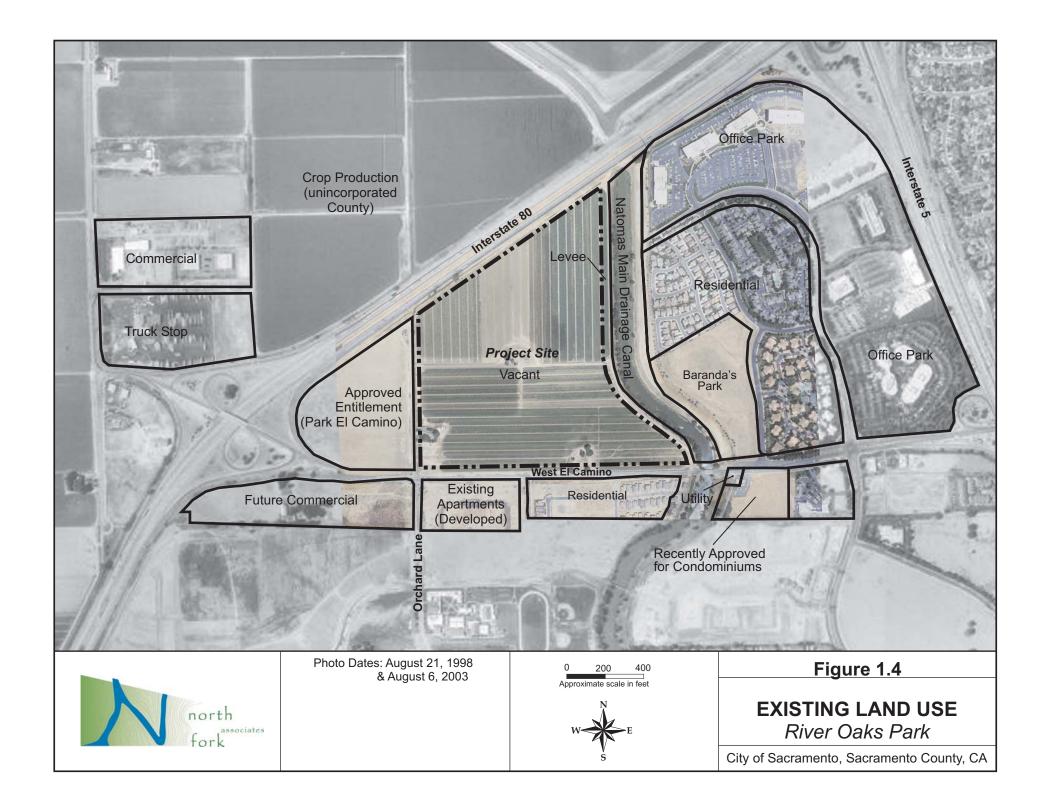
#### **Project Site**

The project site has land use designations in three City land use planning documents; the *City of Sacramento General Plan*, the *South Natomas Community Plan*, and the *Sacramento City Code* and are summarized in *Table II.1*. The General Plan designates the entire ±8880.33-acre site for Low Density Residential, the Community Plan designates the site for both Low and Medium Density Residential use, and the City Zoning Code designates the site for Agriculture and Agriculture Planned Unit Development.

#### Adjacent Properties

The General Plan designates land immediately to the west of the project site as Community/Neighborhood Commercial & Offices, and to the southwest, as Medium Density Residential.

The Community Plan designates these same parcels to the west as Community Commercial and to the southwest across West El Camino Avenue as Neighborhood Commercial.



The Community Plan also designates the vacant property across West El Camino Avenue to the southwest for Neighborhood Commercial. *Figure 1.4* indicates existing and planned land use in the project vicinity. The land across Interstate 80 is in the unincorporated county and is designated Agricultural Cropland in the 1993 County of Sacramento General Plan.

#### **PROJECT COMPONENTS**

#### **Entitlements**

The project applicant is requesting the following entitlements:

#### South Natomas Community Plan Amendment

The applicant is requesting a Community Plan Amendment to redesignate the existing ±80.33 acres from ±46.83 acres of Residential (4-8 du/na) and ±33.50 acres of Residential (7-15 du/na) to ±29.55 acres Residential (7-15 du/na), ±27.03 acres Residential (11-21 du/na), and ±17.73 acres Parks, and Open Space (which includes the water quality/detention Basin, the bicycle trail along the RD1000 canal, and the open space along the freeway), and ±6.02 acres of roads. The map submitted by the applicant asks for the redesignation of ±48.83 gross acres of Residential 4-8 du/na and ±33.50 gross acres of Residential 7-15 du/na to ±28.02 net acres Residential 7-15 du/na, ±30.24 acres of Residential 11-21 du/na and ±9.23 net acres of Parks/Open Space and other uses.

#### **Zoning Amendment**

The proposal would amend the *Sacramento City Code Zoning Regulations* to change the zoning district on the site from the current ±13.48 gross acres Agriculture (A) and ±66.85 gross acres of Agriculture Planned Unit Development (A-PUD) district to ±80.33 gross acres of Single Family Alternate Residential Planned Unit Development (R1-A PUD). *Table II.1* summarizes the current and proposed changes to the City land use maps and *Figures 1.5, 1.6,* and *1.7* depict the current and proposed Community Plan, Zoning Map, and Tentative Subdivision Map respectively.

Table II.1
Proposed Land Use Designation Changes

	Current Designation	Proposed Amendment
City of Sacramento General Plan	±80.33 acres* Low Density Residential 4 -15 du/na*	No change
South Natomas Community Plan	±46.83 acres* Residential 4-8 du/na ±33.50 acres* Residential 7-15 du/na	±28.0229.55 acres Residential 7-15 du/na ±30.2427.03 acres Residential 11-21 du/na** ±9.2311.06 acres Parks/Open Space ±0.510 acres Recreation Center
Sacramento City Code (formerly the Zoning Code)	±13.48 acres* Agriculture (A) ±66.85 acres* Agriculture Planned Unit Development (A-PUD)	±80.33 acres* Single Family Alternate Planned Unit Development (R1-A PUD)

Notes: du/na - dwelling units per net acre

Source: Morton & Pitalo Inc.

#### Planned Unit Development

The applicant has submitted the document *River Oaks Planned Unit Development Guidelines* (February 2004) with their development proposal and is proposing the City adopt a PUD zoning designation for the subject properties per these guidelines. The intent of the PUD Guidelines, and subject to approval by the City, is to apply the City's land use standards to the entire proposed tentative map area rather than to individual lots. This permits the clustering of units in a manner that allows for flexibility in the provision of open space and common areas.

#### **Tentative Subdivision Map**

The project applicant has submitted a tentative subdivision map (see *Figure 1.7*) proposing the eight existing parcels be split to accommodate 654–642 single-family lots and the land uses summarized in *Table II.2*.

#### Special Permit

The applicant is requesting a Special Permit approval from the Planning Commission pursuant to Chapter 17.180.060 of the *Sacramento City Code* to allow for the mix of use types and density proposed and as detailed in the *Construction Activities* discussion and *Table II.2*.

<sup>\*</sup>Gross Includes land in easement(s).

<sup>\*\*</sup>City Development Services Department has determined the Residential 11-21 du/na land use consistent with the General Plan (pers. comm., Johnson-2004b)

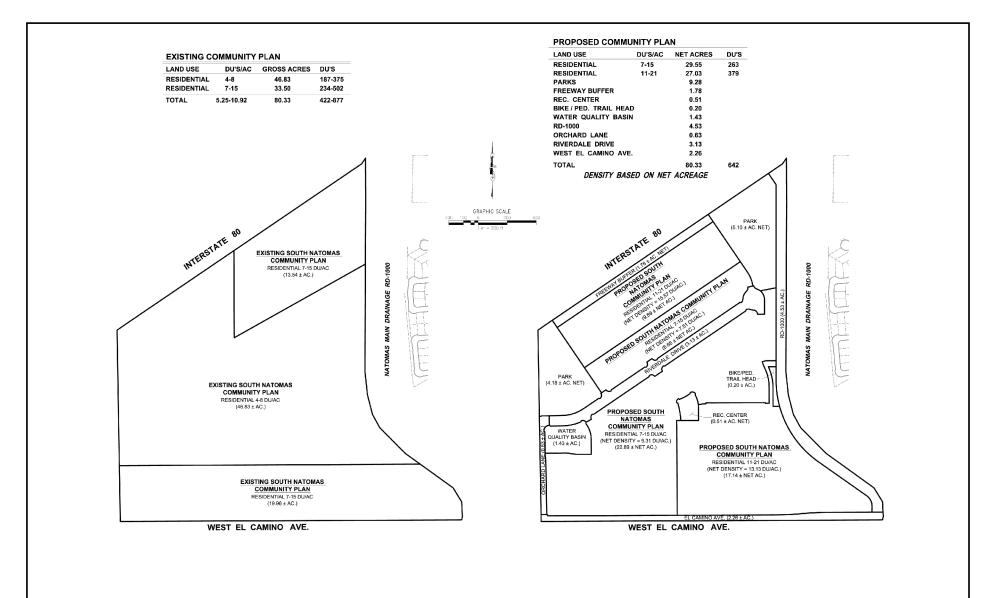
Table II.2
Summary of Proposed River Oaks Park Land Uses

Summary of Proposed River Oaks Park Land Uses			
<u>Land Use</u>	Net Acres	<u>DUs</u>	
Residential	<u>±52.10</u>	<u>642</u>	
Parks /Open Space	<u>±11.06</u>	=	
Recreation Center	<u>±0.51</u>	sq. ft. N/A	
<u>Trailhead</u>	<u>±0.20</u>	==	
Riverdale Drive	<u>±3.13</u>	=	
River Oaks Way	<u>±1.54</u>		
Orchard Lane	<u>±0.63</u>	=	
West El Camino Ave.	<u>±2.26</u>	=	
Water Quality Basin	<u>±1.43</u>	=	
RD-1000 (Trail)	<u>+4.52</u>	=	
<u>Other</u>	<u>2.95</u>		
<u>Total</u>	<u>±80.33</u>	<u>642</u>	
<u>Total</u> <u>Land Use</u>	±80.33 Net Acres	642 DUs	
Land Use	Net Acres	ĐUs	
Land Use Residential	Net Acres ±58.10	ĐUs	
Land Use Residential Parks /Open Space	#58.10 ±9.48	DUs 654	
Land Use Residential Parks /Open Space Recreation Center	#58.10 #9.48 #0.51	DUs 654	
Land Use Residential Parks /Open Space Recreation Center Trailhead	#58.10 ±9.48 ±0.51 ±0.20	DUs 654	
Land Use Residential Parks /Open Space Recreation Center Trailhead Riverdale Drive	#58.10 ±9.48 ±0.51 ±0.20 ±3.11	DUs 654	
Land Use Residential Parks /Open Space Recreation Center Trailhead Riverdale Drive Orchard Lane	#58.10 ±9.48 ±0.51 ±0.20 ±3.11 ±0.67	DUs 654	
Land Use Residential Parks /Open Space Recreation Center Trailhead Riverdale Drive Orchard Lane West El Camino Ave.	#58.10 ±9.48 ±0.51 ±0.20 ±3.11 ±0.67 ±2.34	DUs 654	

Includes landscape easements

#### **EASEMENT ACCESS**

The applicant will need to receive approval from the Reclamation District (RD 1000) to use the  $\pm 4.40$ -acre easement, along the Canal and running the length of the east side of the project site.



#### **EXISTING COMMUNITY PLAN**

#### PROPOSED COMMUNITY PLAN



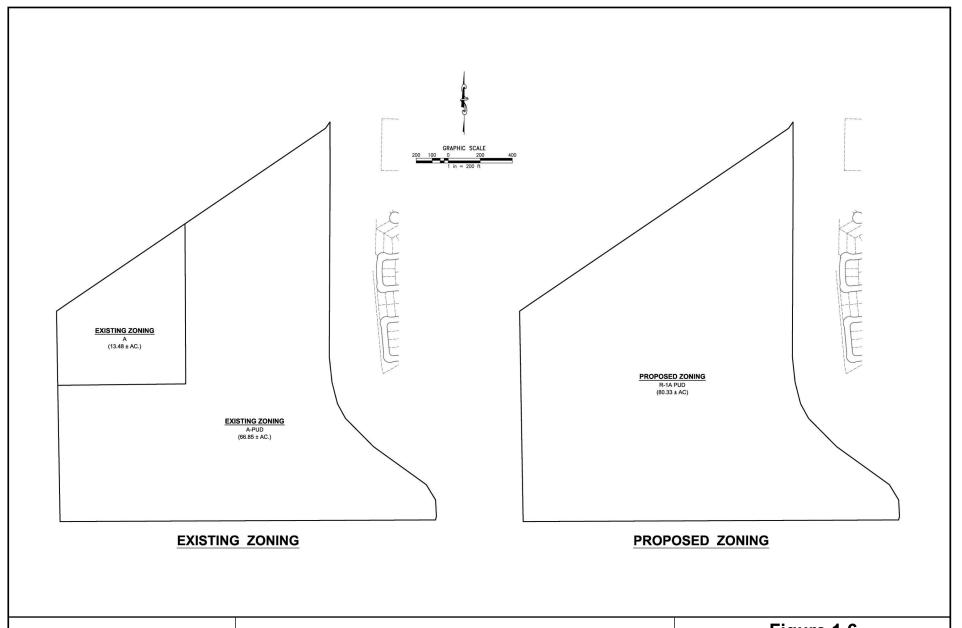
Source: MRO Engineer, Inc. May 2005

### Figure 1.5

# CURRENT AND PROPOSED COMMUNITY PLAN MAP

River Oaks Park

City of Sacramento, Sacramento County, CA





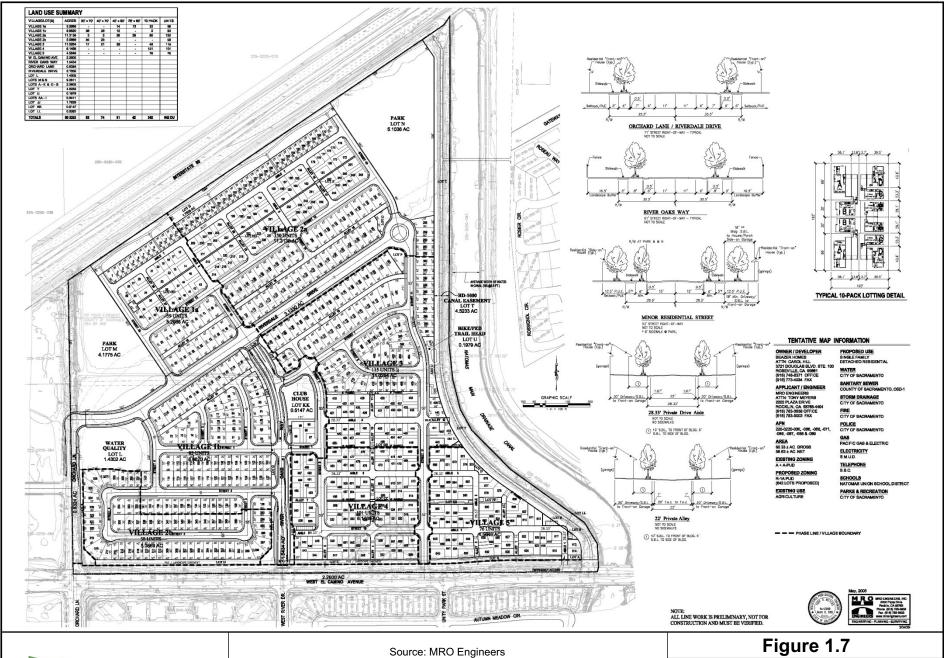
Zoning Map Provided by Morton & Pitalo, Inc. Date: June 2004

### Figure 1.6

# CURRENT AND PROPOSED ZONING MAP

River Oaks Park

City of Sacramento, Sacramento County, CA





Source: MRO Engineers Date: May 24, 2005

### **TENTATIVE SUBDIVISION MAP**

River Oaks Park

City of Sacramento, Sacramento County, CA

#### **CONSTRUCTION ACTIVITIES**

All construction activity will comply with federal and state regulations and the *Sacramento City Code*. The applicant is proposing to construct the following project components:

#### Housing

The applicant is proposing to construct 642 single-family homes on ±52.10acres of the ±80.33 acre site using four different housing types in two distinct neighborhoods. The proposed housing has the following dimensions:

- 91units on 40 x 90 foot lots;
- 93 units on 30 x 70 foot lots;
- 74 units on 40 x 70 foot lots;
- 42 "Brownstone" units on 28 x 68 foot lots, and
- 342 units in "10 pack" lots in unit cluster configurations of 5 to 10 units each.

The applicant is proposing to construct 654 single family homes on ±58.28 acres of the ±80.33 acre site using thirteen different floor plans and various architectural styles. The proposed housing consists of the following dimensions:

```
■94 units on 40 x 80 foot lots;

■95 units on 30 x 70 foot lots;

■70units on 40 x 70 foot lots; and

■395 units in "10 pack" lots in unit cluster configurations of 5 to 10 units each.
```

The architectural styles proposed for the housing types vary in the use of decorative features such as cornices, gables, porticos, pilasters, balconies, and distinct window treatments such as shutters and decorative frames.

#### Parks/Recreation Center

The applicant has included  $\pm 9.23\underline{11.06}$ -acres of parkland including a  $\pm 4.06\underline{-4.18}$  acre park at the northwest corner of the project and a  $\pm 5.17\underline{5.10}$ -acre park at the northeast corner, and a  $\pm 1.78$  linear park between I-80 and residences. The proposed parks will consist of neighborhood parks, which may include parking areas, restrooms, walkways, children's play equipment, dog parks, and sport fields for soccer, baseball, and volleyball. Other amenities may include family picnic areas, horseshoe pits, basketball courts, and toddler play areas. On the east side of the proposed River Oaks Way, near the project's center, the applicant proposes to construct a private community recreation/swim center with vehicle parking, and landscaping on a  $\pm 0.510$ -acre lot owned and maintained by the Homeowners Association.

#### Home Owner's Association (HOA)

A Home Owner's Association will be established to provide for the maintenance of common community open space and the Recreation Center. Project roads will become part of the public right of way and be maintained by the City of Sacramento Development Engineering and Finance Division of the Development Services Department and parkland areas will become

part of the City of Sacramento park system and be maintained by the City of Sacramento Department of Parks and Recreation.

#### Infrastructure

If the project is approved, the pedestrian bridge, roads, sidewalks, bicycle and transit facilities, open space areas, parks, and utilities to serve the project would be required by the City of Sacramento to be developed concurrently.

# Circulation System

The City of Sacramento *South Natomas Public Facilities Financing Plan and Facilities Benefit Assessment* adopted by the City in 1990 identifies future infrastructure improvements needed to serve the development identified in the *South Natomas Community Plan*. The River Oaks Park project identifies transportation traffic improvements including the following facilities.

# **Improvements to Existing Roads**

West El Camino Avenue and Orchard Lane Improvements to West El Camino Avenue and Orchard Lane are currently being constructed and include widening the roadway, a 25-foot improvements, public utility, and landscape easement along the project side of the road (±2.30 acres), sidewalks, and Class II bicycle lanes. The project applicant is required to dedicate right of way to the City to accommodate improvements to West El Camino and Orchard Lane.

Improvements to Orchard Lane are being constructed concurrent to improvements to West El Camino Avenue and include extending the road north from the intersection with West El Camino Avenue to an intersection with the proposed new Riverdale Drive would be constructed. The road improvements would include a public utility easement, landscaping, sidewalks, and Class II bicycle lanes. The project is required to dedicate right of way to the City for these improvements.

**Riverdale Drive** This two-lane major collector street would complete the northern section of a road originally planned for in the *South Natomas Community Plan*. Riverdale Drive would link Orchard Drive to the park at the northeast side of the project with the rest of the Community Plan area by providing a route south to the Garden Highway near the Sacramento River.

Riverdale Drive would have a 71-foot right of way, a 48-foot roadbed, Class II bicycle lanes, and five-foot wide sidewalks along both sides of the street. The sidewalks on either side of Riverdale Drive would be separated from the road by a six-foot landscape strip. The sidewalks would be separated from the proposed uses on either side of the road by a public utilities easement. This roadway would include on street parking areas.

**River Oaks Way** This two-lane minor collector street would traverse the residential portion of the project site from the existing West El Camino Avenue to Riverdale Drive where it ends and a residential street begins. This proposed street is to be constructed with a 61-foot right of way, a 34-foot roadbed, Class II bicycle lanes, and five-foot wide sidewalks along both sides of the street. The sidewalks on either side of River Oaks Way would be separated from the road by an eight-foot landscape strip. The sidewalks would also be separated from the

proposed uses on either side of the road by a 16.5 -foot landscape buffer. This roadway would include on-street parking areas.

Minor Residential Streets The project includes nineteen unnamed interior residential streets that would connect the residences to the proposed collector streets serving the project. These interior streets are proposed to be constructed with 53-foot right of ways, 30-foot roadbeds, no bicycle lanes, and five-foot wide sidewalks separated from the street by a six-foot wide landscape strip and from the uses on either side by 12.5-foot wide public utility and landscaping easements.

**28.33' Private Drive Isles** The project is served by sixteen 28.33-foot wide Private Drive Isles that would be constructed to include two travel lanes on 26.00-foot wide roadbeds with ten-foot front of building and five-foot side of building setbacks. These drive isles do not provide for sidewalks, bicycle lanes, or parking.

**22' Alleys** The project also incorporates four 22-foot wide Public Alleys that would be constructed to include two travel lanes on 20.00-foot wide roadbeds with ten-foot front of building and five-foot side of building setbacks. These alleys do not provide for sidewalks, bicycle lanes, or parking.

## **Improvements to Existing Roads**

West El Camino Avenue and Orchard Lane Improvements to West El Camino Avenue and Orchard Lane are currently being constructed and include widening the roadway, a 25-foot improvements, public utility, and landscape easement along the project side of the road (±2.30 acres), sidewalks, and Class II bicycle lanes. The City Development Engineering and Finance Division adopted a Mitigated Negative Declaration for these improvements prepared in July 2002 by Hughes Environmental Consultants. The project applicant is required to dedicate right of way to the City to accommodate improvements to West El Camino and Orchard Lane.

Improvements to Orchard Lane are being constructed concurrent to improvements to West El Camino Avenue and include extending the road north from the intersection with West El Camino Avenue to where a traffic circle intersection with the proposed new Riverdale Drive will be constructed. The road improvements will include a public utility easement, landscaping, sidewalks, and class II bicycle lanes. The project is required to dedicate right of way to the City for these improvements.

#### New Roads, Bicycle Paths, and Sidewalks

Riverdale Drive — This two lane major collector street would complete the northern section of a road originally planned for in the *South Natomas Community Plan*. Riverdale Drive will link Orchard Drive to the park at the northeast side of the project with the rest of the Community Plan area by providing a route south to the Garden Highway near the Sacramento River.

Riverdale Drive will have a 71-foot right of way, a 48-foot roadbed, Class II bicycle lanes, and five foot wide sidewalks along both sides of the street. The sidewalks on either side of Riverdale Drive would be separated from the road by a six-foot landscape strip. The sidewalks would be separated from the proposed uses on either side of the road by a public utilities easement. This roadway will include on street parking areas.

River Oaks Way

This two-lane minor collector street will traverse the residential portion of the project site from the existing West El Camino Avenue to Riverdale Drive where it ends and a residential street begins. This proposed street is to be constructed with a 61-foot right of way, a 34-foot roadbed, bicycle lanes, and five-foot wide sidewalks along both sides of the street. The sidewalks on either side of River Oaks Way would be separated from the road by an eight-foot landscape strip. The sidewalks would also be separated from the proposed uses on either side of the road by a 16.5-foot landscape buffer. This roadway will include on street parking areas.

Minor Residential Streets — The project includes nineteen unnamed interior residential streets that will connect the residences to the proposed collector streets serving the project. These interior streets are proposed to be constructed with 53-foot right of ways, 30-foot roadbeds, no bicycle lanes, and five foot wide sidewalks separated from the street by a six-foot wide landscape strip and from the uses on either side by 12.5-foot wide public utility and landscaping easements.

**27.33' Private Drive Isles**The project is served by sixteen 27.33 foot wide Private Drive Isles that would be constructed to include two travel lanes on 27.33 foot wide roadbeds with ten foot front of building and five foot side of building setbacks. These drive isles do not provide for sidewalks, bicycle lanes, or parking.

22' Alleys — The project also incorporates four 22-foot wide Alleys that would be constructed to include two travel lanes on 19.67-foot wide roadbeds with ten-foot front of building and five-foot side of building setbacks. These drive isles do not provide for sidewalks, bicycle lanes, or parking.

**Emergency Vehicle Access** A 22-foot driveway is proposed to provide emergency vehicle access from El Camino Avenue to interior residential roads through a gated entry near the El Camino Avenue bridge over the Canal.

#### Multi-Use Trail and Pedestrian Bridge over the Canal

The project includes a  $\pm 4.5052$ -acre strip of land between the project and parallel to the Canal for a sixteen-foot wide pedestrian/bicycle trail along the Canal levee. The trail will feature a bridge over the Canal that will be located at-next to the proposed northeast side park. The trail will be constructed to City Department of Parks and Recreation standards with twelve-foot asphalt paving and two-foot decomposed granite shoulders. The paving will be three inches of asphalt concrete over a minimum twelve inches of aggregate base painted with a centerline stripe. A  $\pm 0.20$ -acre trailhead will be located approximately midway through the residential area along the trail and adjacent to the eastern most residential street.

# **Water Quality Basin**

The project includes a  $\pm 1.4243$ -acre water quality/detention basin located adjacent to the northeast southeast corner of Orchard Lane and Riverdale Drive. The basin will be designed to accumulate storm water runoff from the site to eliminate the potential for offsite flooding and/or sediment discharges resulting from implementation of the project.

#### **Utilities**

The project will construct electrical, natural gas, telephone, cable television, water, storm drain, and sewer infrastructure in the subdivision and along West El Camino Avenue, Orchard Lane, Riverdale Drive, and residential streets in accordance with the City Department of Utilities requirements.

# **Site Preparation and Demolition Activities**

Subsequent to approval of the applicant's grading plan and prior to construction, site preparation and demolition activities will commence in conformance with Section 15.44 of the City Code. Demolition activities will include removal of the debris and former building foundations pursuant to all applicable rules. The site will then be graded to prepare for construction of infrastructure and buildings.

#### **PROJECT PHASING**

The River Oaks Park project will be developed in four distinct construction phases described below. Each construction phase will install roadways, intersection controls and roundabouts, curb, gutter, and sidewalks, and as indicated on *Figure 1.8*.

**Phase I** will consist of grading of the entire property and installation of utility infrastructure to the site. First, the site will be cleared of all materials and graded using a City approved site grading plan. Subsequent to grading, all water and sewer piping, electrical wiring and conduit, cable television wiring and conduit, and telephone wiring and conduit will be installed. Phase 1 will also include:

- © Construction of the community clubhouse and swimming pool on a  $\pm 0.5051$ -acres lot;
- $\blacksquare$  Construction of the  $\pm 1.42$ -acre water quality basin;
- Construction of thirteen seventeen model homes indicated on the map in Figure 1.8;
- © Construction of an additional <u>133-125</u> homes located in the northwest section of the project site;
- Installation of sound mitigation measures and/or landscape buffers between the Interstate and the project; and

Construct the park at the northwest corner of the project site.

**Phase II** will consist of construction of 219208 housing units at two project site locations. The first is at the north side of the project site on a section of land between the new Riverdale Lane and Interstate 80. The second is on a section of land located at the corner of West El Camino Avenue and Orchard Lane. Phase II will also install sound mitigation measures along West El Camino Avenue.

**Phase III** will consist of construction of 114-115 housing units in an area at the east side of the project site south of Riverdale Lane. This phase will also include:

- Construction of the park at the northwest corner of the project site;
- Installation of a  $\pm 0.20$ -acre trail head;
- © Construction and landscaping of the trail system along the Natomas Main Drainage Canal levee on two easement lots totaling ±4.50-52 acres; and

The construction of a pedestrian bridge linking the project trail to the trails across the Canal.

**Phase IV** will consist of construction of 101 housing units on lots located along West El Camino Avenue at the midpoint of the project site and at the center of the site. Phase IV will continue construction of the sound wall and landscaping along West El Camino Avenue.

**Phase V** will consist of construction of 74-76 units located along West El Camino Avenue at the east end of the project site and the center of the site. Phase V will continue construction of the sound wall and landscaping along West El Camino Avenue.

# **Construction Staging Area(s)**

A staging area potentially consisting of materials storage areas, temporary office trailers, parking areas for workforce and equipment would be needed for the duration of all project construction. The exact location of staging sites for each construction phase has not been determined.

#### ADDITIONAL REGULATORY REQUIREMENTS

# **Army Corps of Engineers**

The proposed pedestrian bridge spanning the Canal may require a permit if it is designed in a manner that will cause the discharge of fill and/or dredge materials into "waters of the United States" as defined by Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899.

# California Department of Fish and Game

Under Section 1600 et. seq., of the California Fish and Game Code, an entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake prior to acquiring a permit from the California Department of Fish and Game (DFG).

#### Regional Water Quality Control Board

For any activity which may result in a discharge to a water body, he Regional Water Quality Control Board (RWQCB) will require the applicant to obtain a Section 401 (Clean Water Act) water quality certification that the proposed activity will comply with state water quality standards.

# SB 610 Water Assessment and SB 221 Water Supply Verification

Senate Bill 610 (Chapter 643, Statutes of 2001) and Senate Bill 221 (Chapter 642, Statutes of 2001) require detailed information regarding water availability to be provided to city decision makers prior to approval of specified large development projects. This information will serve as the evidentiary basis for an approval action by the City of Sacramento with regard to sufficient water supply.

#### Reclamation District 1000

The Natomas Main Drainage Canal is under the jurisdiction of the State Reclamation Board. The project will be required to obtain an encroachment permit from the local district, Reclamation District 1000 (RD-1000) to place the proposed pedestrian/bicycle bridge over the Canal.

# **Local Improvement Districts**

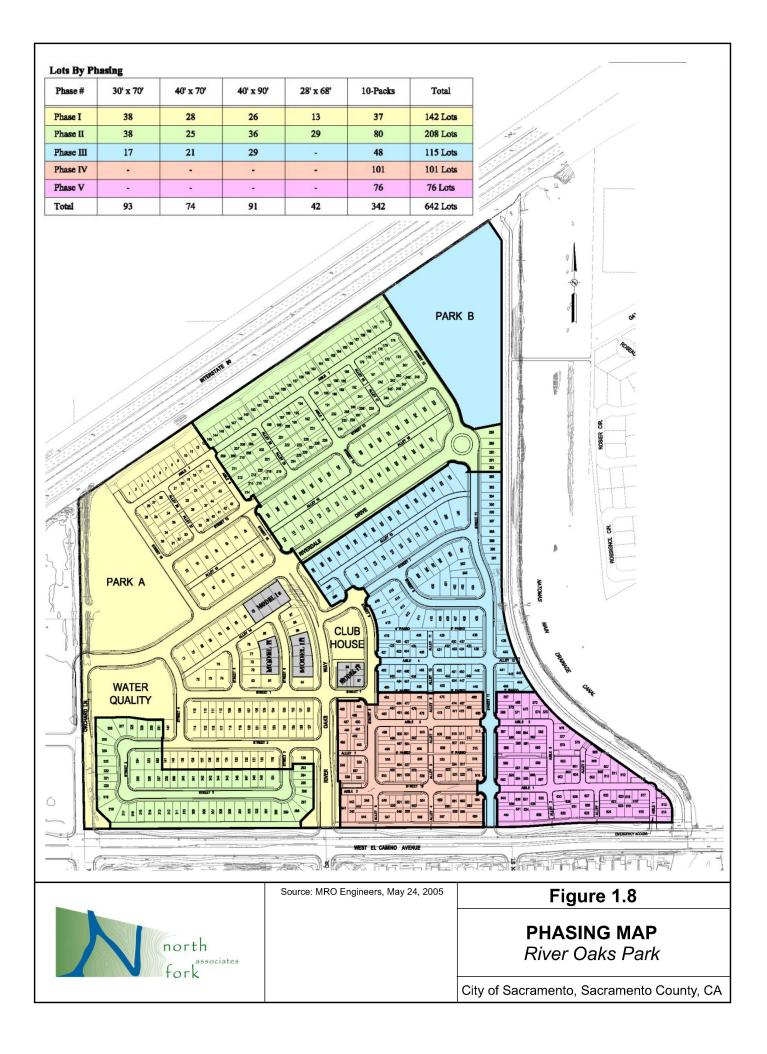
The proposed project is located on parcels of land participating in various special districts. The project will The project will be subject to fees, annual payments, or assessments including:

• The South Natomas Public Facilities Financing Plan and Facilities Benefit Assessment:

The assessment includes fire station, library, community center, transportation facilities improvements.

- West El Camino Landscaping District.
- Parks Maintenance District
- Road Maintenance District

Other districts may apply. The project HOA may pay for and maintain some or all of the project's internal facilities.



#### **TECHNICAL APPENDICES**

The following technical studies are cited in this Initial Study and are available for public review at the following location:

City of Sacramento Development Services Department, Environmental Planning Services 1231 I Street, Room 300, Sacramento, CA 95814-2998 (916) 264-7185

- Certified Arborist Assessment for the ±75-acre River Oaks Park Project, City of Sacramento, Sacramento County, California. North Fork Associates, September 27, 2004.
- Cultural Resources Inventory of the River Oaks Park Project, PAR Environmental Services, Inc. Sacramento, California, February 2004.
- Biological Resource Assessment for the ±75-acre River Oaks Park Project, August 27, 2003.
- Biological Resource Assessment for the River Oaks Park Pedestrian Bridge Alignment,
- Biological Resource Assessment for the Expansion of West El Camino Avenue, City of Sacramento, Sacramento County, California, September 22, 2004.
- Environmental Noise Analysis, Bollard and Brennan Environmental Noise Consultants, October 28, 2004.
- Environmental Site Assessment River Oaks Park, Wallace Kuhl & Associates Inc, August 7, 2003.
- Traffic Study, Dowling and Associates, September 2004
- URBEMIS 2002 Air Quality Modeling, North Fork Associates, September 2004.
- Wetland Delineation for the ±75-acre River Oaks Park Project, North Fork Associates, August 20, 2003.
- Wetland Delineation Verification Letter, U.S. Army Corps of Engineers, February 18, 2004.

#### OTHER DOCUMENTS CITED IN THIS INITIAL STUDY

The following planning documents are cited in this Initial Study and are available for public review at the following location:

City of Sacramento Development Services Department, Environmental Planning Services 1231 I Street, Room 300, Sacramento, CA 95814-2998 (916) 264-7185

City of Sacramento General Plan with Amendments through April 26, 2002;

City of Sacramento General Plan Update; Draft Environmental Impact Report 1987;

South Natomas Community Plan Adopted by City Council November 29, 1988, and Natomas Basin Habitat Conservation Plan, April 2003.

City of Sacramento Department of Utilities. 2002 Water Quality: A Consumer Confidence Report for the Citizens of Sacramento.

City of Sacramento Bikeways Master Plan with Amendments Natomas Area. City of Sacramento.

City of Sacramento Department of Utilities. Water Facilities Expansion Project Draft EIR

South Natomas Public Facilities Financing Plan and Facilities Benefit Assessment. City of Sacramento, 1990.

City of Sacramento Code (Zoning Code), October 22, 2003

South Natomas Public Facilities Financing Plan and Facilities Benefit Assessment, March 1990.

2020 Wastewater Master Plan for the Sacramento Regional Wastewater Treatment Plant. Sacramento Regional County Sanitation District, 2000.

2004 Solid Waste Management Plan. State of Nevada Environmental Protection Agency.

Draft River Oaks Planned Unit Development Guidelines, February 2004.

# SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION

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

#### **ENVIRONMENTAL SETTING**

# **Existing Land Uses**

The site has recently been used for the production of agricultural row crops, a single family home, a produce stand, and storage. The site is generally flat open space with seasonal crop production areas served by irrigation trenches and dirt roads. The site has been used for farming since the 1910's, when the Natomas Reclamation District 1000 (RD-1000) was formed by the State Legislature in response to floods in 1907. The RD-1000 built a system of levees and canals and drained the greater Natomas Basin, including for flood control and agricultural purposes. A component of the RD-1000 system, the levee-lined Natomas Main Drainage Canal, runs along the east boundary of the project site (PAR, 2004).

The existing land uses immediately adjacent to the project site include residential development to the south across West El Camino Avenue and east across the Canal. An office park is located across the Canal northeast of the project site along Interstate 80. Barandas Park is located across the Canal along West El Camino Avenue to the east. Across Interstate 80, unincorporated land is in agricultural crop production. The West El Camino Avenue interchange with Interstate 80 is located west of the project site. A truck stop, fueling station, and restaurant are visible from the project site across Interstate 80 to the northwest. Agricultural parcels of land immediately west of the project and across West El Camino Avenue to the south and southwest are planned for future commercial development.

# **Regulatory Setting**

In 1984, the Sacramento Local Agency Formation Commission (LAFCO) annexed the project parcels into the City. The parcels are located adjacent to the City limits that now run along the north side of the project and along Interstate 80. The project site is designated for residential use in the City of Sacramento General Plan and the South Natomas Community Plan (SNCP), and for agricultural use in the zoning regulations of the Sacramento City Code. The SNCP was adopted in 1988 by the City of Sacramento to guide the development and urbanization of 3,460 acres located north of Downtown Sacramento and bordered on the north and west by Interstate 80, the Sacramento and American Rivers to the south, and the Natomas East Main Drainage Canal to the east. The project site is one of the few remaining sections of land in the SNCP area still in

agricultural use. The entire SNCP area is planned for urban uses at buildout. The SNCP specifically designates the project site for both low and medium density housing use.

#### Sacramento General Plan Policies

Overall Urban Growth Policy 4 of the General Plan calls for approved development in new growth areas to promote efficient growth patterns and public service extensions compatible with adjacent developments. Policy 6 requires that each General Plan and Community Plan amendment undergo evaluation for its impact to General Plan and Community Plan goals and policies. Overall Urban Growth Policy 12 (Smart Growth Resolution 2001-805) promotes sustainable and balanced development that makes efficient and effective use of land resources and existing infrastructure. Policy 12 also encourages mixed land uses; a range of housing opportunities near employment centers; walkable close knit neighborhoods; the provision of a variety of transportation choices; and the concentration of new development and targeting of infrastructure investments at the urban core to allow for the efficient use of existing facilities, infill, and reuse areas.

# General Plan Low Density Residential Land Use Category

The General Plan land use category for the entire project site is Low Density Residential 4-15 dwelling units per net acre (du/na). Typical development in areas with this designation consist of single-family detached units, duplexes, halfplexes, townhouses, condominiums, zero lot line units, and cluster houses.

# South Natomas Community Plan Policies

When the SNCP was adopted in 1988, 32% of its planning area was either in agricultural use, or vacant. At buildout, the plan area will be completely urbanized. SNCP Land Use Guiding Policy A calls for a high quality, mixed use community providing locations for residential, commercial, office, and business park land uses designed to enhance neighborhood and plan area identity with an adequate level of supporting public facilities and services.

### **SNCP Land Use Designations for Project Site**

Low Density Residential (4-8 du/na) Maximum average density is seven units per net acre (5.6 units per gross acre). Single-family attached and detached units (including patio homes, duplexes, and halfplexes) are allowed within this designation.

Medium Density Residential (7-15 du/na) Maximum average density is 10 units per net acre. The intent of this range is to provide a predominance of single-family housing types. The range allows detached single-family, zero lot line, patio home, duplex, halfplex, townhouse, and condominium development. Senior housing may develop at a maximum average density of 14 units per net acre.

#### **SNCP Residential Land Use Policies**

The following policies guide residential land use in the Community Plan area.

**SNCP Population and Housing Guiding Policy A** calls for the provision of housing of varied types, densities, and prices, arranged to enhance neighborhood identity, to create and maintain family-oriented environments, and to avoid visual monotony.

**SNCP Population and Housing Implementing Policy F** requires three or more housing types in residential projects of 30 gross acres or more and two or more housing types in projects of 20 to 29 gross acres.

**SNCP Population and Housing Implementing Policy P** encourages developers of new housing to provide upscale housing through lower densities and/or additional amenities via the PUD process. The policy also encourages the inclusion of architectural variations, quality exterior building materials, quality landscaping, large lot sizes, extra vehicle storage, the use of landscaping and lighting districts and Homeowners Associations and marketing to attract "move up" or second time home buyers

# Sacramento City Code Zoning

# **Current Zoning for Project Site**

**A- Agriculture District:** This is an agricultural district restricting the use of land primarily to agriculture and farming. It is also considered an open space zone. Property in this zone will be considered for reclassification when proposed for urban development which is consistent with the general plan.

**A-OS-PUD Agriculture-Open Space District:** Planned Unit Development This is an exclusive agricultural district designed for the long-term preservation of agricultural and open space land. This zone is designated to prevent the premature development of land in this category to urban uses.

The agricultural zoning districts currently applied to the project site are not consistent with the General or Community Plan residential land use designations. *Table 1.1* summarizes the land use designations applicable to the project found in the General Plan, Community Plan, and Zoning.

Table 1.1
City of Sacramento Designated Land Use

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Document	Current Land Use Designation			
City of Sagramenta Congral Plan	±80.33 acres*			
City of Sacramento General Plan	Low Density Residential 4 -15 du/na*			
	±46.83 acres*			
South Natomas Community Plan	Residential 4-8 du/na			
South Natomas Community Flam	±33.50 acres*			
	Residential 7-15 du/na			
	±13.48 acres*			
Sacramento City Code (formerly the	Agriculture (A)			
Zoning Code)	±66.85 acres*			
	Agriculture Planned Unit Development (A-PUD)			

Source: City of Sacramento

# **SNCP Land Use Policy**

SNCP Land Use Implementing Policy B calls for projects to develop as planned unit developments (PUD) in an effort to ensure high quality development. It is intended that a PUD

be utilized for large acreage developments capable of achieving the distinct environmental characteristics consistent with Section 17.180 of the City of Sacramento Code. The applicant has submitted the document *Draft River Oaks Planned Unit Development Guidelines* the purpose of which is to specify a common design theme for the entire project site consistent with the goals and policies of the SNCP. The PUD Guidelines set forth the project design and development standards and outlines the steps in the project entitlement process as follows:

- 1) Development Agreement, PUD Designation, Rezoning and Tentative Master Parcel Map;
- 2) PUD Guidelines and PUD Schematic Plan;
- 3) Tentative Subdivision Map;
- 4) Special Permit.

#### Natomas Basin Habitat Conservation Plan

The Natomas Basin Habitat Conservation Plan (NBHCP) is a conservation plan for an area encompassing approximately 53, 537 acres north of Sacramento including the project site. The NBHCP was prepared and implemented by a variety of federal, state, and local agencies including:

- The US Fish and Wildlife Service;
- The California Department of Fish and Game;
- The City of Sacramento;
- Sutter County;
- RD 1000; and

The Natomas Basin Conservancy.

Habitat Conservation Plans (HCP) are required by the federal Endangered Species Act, and are designed to support applications for federal permits under Section 10 (a)(1)(B) of the Endangered Species Act. The NBHCP serves as an incidental take permit under State law pursuant to Section 2081(b) of the California Fish and Game Code.

The purpose of the NBHCP is to promote biological conservation in conjunction with economic and urban development within the HCP area. The NBHCP establishes a multi-species conservation program to minimize and mitigate the expected loss of habitat values and incidental take of Covered Species that could result from urban development, and other human activities in the HCP area.

The City of Sacramento requires the proponents of all new development in the HCP area to dedicate suitable land or fees as described in Chapter V of the NBHCP to minimize and mitigate the take of species covered by the HCP. The NBHCP is discussed further in Checklist item 7. *BIOLOGICAL RESOURCES*.

# **Other Planning Documents**

Citywide plans for specific services and facilities applicable to the project area are the *City of Sacramento Parks and Recreation Master Plan Update 2004*, the *Sacramento Bikeways Master Plan* (both discussed further in 15. RECREATION), and the *Sacramento Public Library Master Plan* (discussed further in 11. Public Services).

#### STANDARDS OF SIGNIFICANCE

For the purposes of this analysis, an impact is considered significant if the project would:

- Substantially change the land use of the site;
- Be incompatible with long-term uses on adjacent properties; or

Conflict with applicable land use plans.

# ANSWERS TO CEQA CHECKLIST QUESTIONS

# A) WOULD THE PROJECT ALTER THE PRESENT AND/OR PLANNED USE OF THE SITE?

Recently, the site has been used for agriculture and related storage, a retail produce stand, and a single-family home. The proposed project will construct housing, parkland, a recreation center, roads, a pedestrian and bicycle bridge, and a pedestrian/bike trail. The project will also construct water, sewer, electrical, telephone, cable infrastructure, and roads to serve the project. The project would completely change the physical use at the site by replacing the agricultural use at the site with a residential community with parks and trails.

# **Plan Consistency**

# City of Sacramento General Plan

The proposed project will develop 654-642 single-family homes on  $\pm 58.0556.58$  acres of the  $\pm 80.33$ -acre site. The single-family detached homes proposed by the project are consistent with the types of homes described in residential density of the Low-Density Residential land use category in the General Plan.

The project is adjacent to the new growth areas discussed in the General Plan Overall Urban Growth Policy 4 located within reach of public service extensions and is compatible with adjacent housing developments. The project is proposing single-family homes targeted for the first-time homebuyer in distinct walkable neighborhoods near downtown employment centers. The project is providing interconnectivity with adjacent developments and creating onsite recreation opportunities with the construction of parklands and trails. These project features are consistent with the "Smart Growth" principles set forth in Overall Urban Growth Policy 12.

### South Natomas Community Plan

The variety of housing types proposed by the project are consistent with *South Natomas Community* (SNCP) Guiding Policy A calling for the provision of housing of varied types, density, prices, and to enhance family oriented neighborhoods avoiding visual monotony.

The variety of housing proposed (thirteen floor plans and four architectural styles) is consistent with SNCP Population and Housing Implementing Policy F requiring three or more housing types in projects over thirty acres in size.

The project is proposing the approval of a Planned Unit Development for the project site with housing, recreation center, parks, open space, and trails. The proposed PUD is consistent with SNCP Population and Housing Implementing Policy P calling for the use of the PUD process to provide upscale housing through lower densities and/or the provision of amenities.

# **Zoning and South Natomas Community Plan Amendments**

# **Proposed Zoning District Changes**

California law requires the Community Plan and Zoning to be consistent with the General Plan. The project proposes that the zoning regulations be amended to change the old agricultural district designations to residential designations consistent with the adopted General Plan and SNCP. While agricultural use at the site is consistent with the agricultural zoning districts currently in place, the old zoning for the site has not been consistent with the SNCP or the General Plan since these two plan documents were adopted in 1988. While the agricultural use has been grandfathered in at the site, both the General Plan and the SNCP call for the development of the site with residential uses.

The current zoning land use districts applicable to the site are Agricultural (A) and Agricultural Planned Unit Development (A-PUD). This proposal would change the zoning to Single Family Alternate Planned Unit Development (R1-A PUD). The area surrounding the project site has been, and is continuing to develop with urban uses consistent with the SNCP and General Plan; therefore, the change in use will have less impact to current land uses.

# **River Oaks Planned Unit Development Guidelines**

The purpose of PUD, according to Chapter 17.180, the Sacramento City Code PUD ordinance, is:

"...to provide greater flexibility in the design of integrated developments than otherwise possible through strict application of zoning regulations. It is the intent of this chapter (PUD regulations) to encourage the design of well-planned facilities which offer a variety of housing or other land uses through creative and imaginative planning, among them the following types of developments:

A. Residential. Residential subdivision developments which may include a variety of housing types and site plans, accessible open "green spaces," or common recreational areas, an attractive and well-oriented community meeting place or recreational facility, and other features of substantial benefit to a viable and balanced community."

The applicant has submitted the draft *River Oaks Planned Unit Development Guidelines* prepared by Morton & Pitalo, Inc. in February 2004. The PUD guidelines propose to establish design standards for the proposed project including for circulation and parking; building designs; zoning and land use standards; and open space area designs and use. Permits for development within the PUD zoning area would be issued pursuant to the requirements of the *Sacramento City Code*.

# South Natomas Community Plan Changes

The project proposal would require an amendment to the SNCP to change the land use designations to reflect changes in boundary lines and density across the project site. *Table 1.2* provides a comparison of the overall existing and proposed densities for the project site. The comparison in *Table 1.2* indicates the number of dwelling units (DUs) allowed under the existing SNCP residential designation for the site, and the proposed residential density for the entire site. The table indicates the number of housing units allowed by the SNCP is between 422-710 dwelling units. The project is proposing 654-642 units through a PUD, and consistent with the overall number of units called for in the SNCP.

Table 1.2
South Natomas Community Plan Residential Density

	Existing			Proposed	
Land Use	DU/AC	Gross Acres*	DU Range	Net Acres	DUs
Residential Residential	4 <del>-8</del> 4-8	±46.83 ±46.83	<del>187-375</del> <u>187-375</u>		<del></del>
Residential	7-15	±33.50	234-335	±29.5629.55	258 <u>263</u> (8.73 du/ac)**
Residential Proposed	11-21			±28.4927.03	<del>396</del> 379 (13.92 du/ac)**
Total		±80.33	422-710	±58.05 <u>56.58</u>	<del>65</del> 4 <u>642</u>

<sup>\*</sup>Includes land proposed for parks and easements

The <u>654-642</u> single-family homes proposed by the project fall within the development density range consistent with the planned land use for the site in the SNCP. The type of housing and project features are consistent with the land use policies in the SNCP. Therefore, the changes to the project site will have a less-than-significant effect on the planned land use at the site as described in the SNCP.

### B) AFFECT AGRICULTURAL RESOURCES OR OPERATION

As stated above, the project site has been used for agricultural production since the 1910's (PAR, 2004). The project area is located in one of the most productive agricultural regions in the world. The soils at the site as reported in the June 1990 U. S. Department of Agriculture, Soil Conservation Service, *Soil Survey of Sacramento County, California* are Consumes silt loam 0 to 2 percent slopes (where irrigated), and Sailboat silt loam, 0 to 2 percent slopes (where irrigated). Both soils meet U.S.D.A. Natural Resources Conservation Service criteria for prime farmland.

The proposed project would convert this prime farmland to non-agricultural residential and related uses. Impacts to prime farmland associated with the proposed project fall within the scope of the Statement of Overriding Considerations prepared for the *Sacramento General Plan Update Environmental Impact Report* (SGPU, DEIR).

<sup>\*\*</sup>Actual proposed du/ac

Since the project site has been identified in the City General Plan and the Community Plan for conversion to residential use and the Statement of Overriding Considerations regarding the conversion of prime farmland adopted by the City pursuant to CEQA, the project will have a less-than-significant effect on prime farmland.

# **Mitigation Measures**

With the SNCP and Zoning Amendments no further mitigation measures are proposed or recommended.

#### **FINDINGS**

The proposed project is consistent with the adopted residential land use designations in both the City of Sacramento General Plan and the South Natomas Community Plan. The Statement of Overriding Considerations adopted by the City for Sacramento General Plan Update Environmental Impact Report applies to the conversion of agricultural land proposed by the project and pursuant to CEQA Guidelines Section 15093.

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

#### **Environmental Setting**

The South Natomas area has been rapidly developing along with the rest of the Natomas Basin area. According to the 2000 U.S. Census, during the period from 1980 to 1990 the South Natomas area grew from 10,418 persons to 34,587 persons, or over 241%. Between 1990 and 2000, the rate of growth slowed to 11.8% as the South Natomas Community grew to 38,678 persons.

### Standards of Significance

For the purposes of this analysis, 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.

# **ANSWERS TO CHECKLIST QUESTIONS**

# A) INDUCE SUBSTANTIAL GROWTH IN AN AREA EITHER DIRECTLY OR INDIRECTLY?

The proposed project will extend infrastructure (i.e., water, sewer, electricity, natural gas, cable, to ±80.33 acres to construct 654-642 units of market rate single-family housing on land currently used for agricultural production and a single-family home. The infrastructure extension required to serve the project is consistent with the SNCP plan to provide infrastructure to new development throughout the plan area and consistent with the planned growth in the SNCP area.

The 2000 U.S. Census reported the average owner occupied household size in the City of Sacramento as being 2.65 persons. Given the average household size, it is estimated 1,7331,701 persons will live at the project site subsequent to construction and full occupancy of its 654 642 single-family homes. In 2000, according to the City of Sacramento General Plan Housing Element, the entire area of the SNCP was 3,521 persons short of the buildout population of 42,199 persons (SGPU HE). The proposed project, if built, would therefore accommodate 49.248.3% of remaining SNCP buildout population.

While the proposed project would accommodate close to half of the remaining SNCP buildout population, this growth is consistent with that called for in the Community Plan. Therefore, the growth induced by the project is within the population projection thresholds identified in the SNCP and will have a less-than-significant growth inducing effect.

# B) DISPLACE EXISTING HOUSING, ESPECIALLY AFFORDABLE HOUSING?

The project will result in a net increase of the housing supply in the area. The project will not displace affordable housing. The project will construct 654-642 homes, having a net increase in housing opportunities and will therefore have a less-than-significant effect on the displacement of housing, particularly affordable housing.

# **Mitigation Measures**

No mitigation measures are proposed or recommended.

#### **FINDINGS**

The project will increase the housing supply in the City of Sacramento without displacing an significant numbers of homes or affordable housing in the City.

	Potentially Significant	Potentially Significant Impact Unless	Less-than- significant
Issues:	Impact	Mitigated	Impact
3. SEISMICITY, SOILS, AND GEOLOGY	Impact	winigated	mipact
Would the proposal result in or expose people to potential impacts involving:			Х
A) Seismic hazards?			

		Potentially	
		Significant	
	Potentially	Impact	Less-than-
	Significant	Unless	significant
Issues:	Impact	Mitigated	Impact
B) Erosion, changes in topography or unstable soil			X
conditions?			
C) Subsidence of land (groundwater pumping or			
dewatering)?			X
D) Unique geologic or physical features?			X

### **ENVIRONMENTAL SETTING**

# Regional Geology

The project site is located in the Natomas Basin in the Sacramento Valley. The Sacramento Valley is part of the Great Valley geomorphic province which stretches north and south over a major portion of Central California. The geomorphic features in the Natomas Basin are characterized by a relatively flat alluvial plain and low sedimentary floodplains found along the Sacramento and American rivers. These landforms include natural levees; alluvial plains; and floodplains bordering the Sacramento, American, and Consumnes rivers and their tributaries. Bar and channel topography is evident on the low floodplains along the American River and was the site of shallow lakes and marshes prior to construction of the RD-1000 canal and levee system. Floodplains not protected by a system of levees, canals, or dams are frequently inundated with floodwater.

In August 2003, Wallace Kuhl & Associates Inc., completed a Phase 1 Environmental Site Assessment of the project site titled *Environmental Site Assessment River Oaks Park*, which contains an assessment of the regional geology and summarized here (See Appendix 1). The Site Assessment references the U.S. Geological Survey's *Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley and Northern Sierra Foothills, Californ*ia, which indicates the project site is underlain by Holocene alluvial deposits (occurring within the last 10,000 years). The deposits consist of unweathered gravels, sand, silt, clay, and mixtures thereof, deposited by present-day (as opposed to ancient) stream and river systems. These deposits form natural levees along the main course of the Sacramento River, and broad alluvial fans of low surface relief along the western and southwestern sides of the Sacramento Valley.

Goal A of the *City of Sacramento General Plan, Health and Safety Element* requires the City protect lives and property from unacceptable risk of hazards due to seismic and geologic activity. The policies supporting this goal prohibit building across faults and require soils reports and geological investigations for determining the risk of liquefaction, expansive soils, and subsidence problems on subdivision development sites.

#### STANDARDS OF SIGNIFICANCE

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

# **ANSWERS TO CHECKLIST QUESTIONS**

#### A) SEISMIC HAZARDS?

# Seismicity

Seismic activity consists of two primary components; faulting and ground shaking. Within the City of Sacramento and the greater Sacramento region, there are no known faults or Alquist Priolo special studies zones. The major faults located closest to the City are the Dunnigan Hills fault, approximately 25 kilometers west of the City; the Bear Mountain fault; 35 kilometers to the east; the Midland fault, located 35 kilometers to the west; and the New Melones fault, located 65 kilometers to the east. Cities in California are required by Government Code Section 65302 to consider seismic safety as part of the General Plan safety elements. The City of Sacramento General Plan Update Draft Environmental Impact Report identifies all of 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. The City requires all new structures be designed to withstand ground shaking of VII intensity level, since the City is located in Zone 3 of the Uniform Building Code Seismic Risk Map of the United States (SGPU, DEIR, T-20).

Development of the project is required to adhere to UBC and City standards for construction in areas subject to seismic hazards. Title 15 of the *Sacramento City Code* also requires implementation of Uniform Building Code (UBC) containing State and federal earthquake protection standards during building construction. The City implements these policies through the building permit process for new construction projects. This will reduce potential impacts from seismic hazards to less-than-significant levels.

#### Liquefaction

Liquefaction is the loss of soil strength as a result of seismic forces acting on water-saturated granular soils leading to a "quicksand" condition generating various types of ground failure. Soil types, soil density, groundwater level, and the duration and intensity of ground shaking influence the potential for liquefaction. Liquefaction is most likely to occur in low-lying areas of poorly consolidated to unconsolidated water-saturated sediments or similar deposits of artificial fill. Areas underlain with alluvial deposits containing silt and sand are susceptible to liquefaction during seismic events if the materials are saturated and sufficient ground shaking occurs.

Much of the Sacramento area including the project site has high groundwater levels and alluvial deposits that have the potential to liquefy during an earthquake. Development is required to conform to UBC standards and Title 15 of the *Sacramento City Code*. City code also requires the preparation and grading of soils subject to liquefaction prior to and during construction. UBC standards implemented in project construction and mandatory review and approval by City Building Division will ensure the danger from liquefaction will be reduced to less-than-significant levels.

#### Settlement

Settlement is the compaction of soils and alluvium caused by ground shaking. Such settlement may range from a few inches to several feet, and is controlled, in part, by bedrock surfaces and old lake, slough, swamp, and stream beds. The project site, due its history of being a floodplain, may be subject to settlement from ground shaking. Settlement can occur from

increased static loads such as those imposed by foundations for structures or from liquefaction and densification of silts and loose sands as a result of seismic loads. As previously stated, the preparation of a geotechnical report and grading plan meeting UBC standards and Title 15 of the *Sacramento City Code* for soils preparation and grading of the project site prior to construction will be required. The danger from settlement is reduced to less-than-significant levels during construction inspection and review by the City Building Division.

# B) EROSION, CHANGE IN TOPOGRAPHY, OR UNSTABLE SOIL?

# **Topography and Soils**

The topography of the project site is relatively flat at approximately fifteen feet above mean sea level with the site draining gradually from east to west to a drainage running from south to north under Interstate 80 along the project site west property line.

The soils in the project area have accumulated on Holocene alluvial deposits, on natural levees, and within the floodplain of the Sacramento River. The deposits near surface are mapped by the June 1990 *U. S. Department of Agriculture, Soil Conservation Service, Soil Survey of Sacramento County, California* as Consumes silt loam 0 to 2 percent slopes (where irrigated), and Sailboat silt loam, 0 to 2 percent slopes (where irrigated).

The Sailboat silt loam is located on much of the southern three-fourths of the project site and makes natural levees on low flood plains at elevations of 10 to 25 feet above mean sea level. The surface layer typically consists of a sixteen-inch thick light yellowish brown silt loam, underlain by a twelve-inch thick very pale brown silt loam. Below this layer, a six-inch thick buried surface layer of grayish brown clay loam is underlain by a 62-inch thick light brownish gray loam. The northwest portion of the project site is underlain with Consumes silt loam on low flood plains at elevations of between fifteen and twenty feet above mean sea level. The surface layer typically consists of an eight-inch thick pale brown silt loam underlain by approximately thirteen inches of pale brown silty clay loam and clay, then 22-inches of gray clay underlain by seventeen-inches of gray and pale brown clay loam.

The site is relatively flat with little or no slope, and therefore the change in topography is minimal. The Natomas and Sailboat loam soils at the project site are expansive and exhibit high shrink/swell potential. The project is proposing to disturb the entire site with ground cuts and grading to install building pads and underground infrastructure.

In order to assess site specific conditions prior to grading at the site, City Code requires the project applicant prepare a detailed geotechnical and soil analysis of the project site including a detailed analysis of surface and subsurface conditions, per UBC, for individual structures proposed for development. The information from the soil investigation is incorporated into the site-specific engineering and seismic designs for the proposed structures as required by the Development Services Department. Satisfaction of Development Services Department conditions is required prior to the issuance of building permits. If the potential for geologic, soils, or seismic hazards exists on the site, implementing UBC standards in subdivision design ensure new construction incorporates seismic safety features. The geotechnical investigation and UBC standards improve seismic safety in building construction and reduce seismic hazards to less-than-significant levels.

Construction at the site has the potential to encounter unstable soil conditions. The geotechnical investigation prepared to comply with City Codes will provide site-specific information regarding soils and geologic conditions and recommend project specific soils preparation and grading recommendations. The project applicant shall prepare a grading plan in compliance with Chapter 15.88 of the Sacramento City Code, the City Grading, Erosion, and Sediment Control Ordinance. The City requires adherence to UBC standards in ground preparation to alleviate high shrink/swell potential in soils, a seasonally high water table, and low permeability soil conditions. The potential for erosion and unstable soil conditions at the project site is reduced to less-than-significant levels with compliance to all applicable building codes.

# C) SUBSIDENCE?

Subsidence is the gradual lowering or sinking of the earth's surface with little or no horizontal motion and occurring of a broad area. Subsidence in the City of Sacramento is primarily a result of excessive pumping of groundwater for urban and agricultural uses (SGPU, 8-8). The project parks and open space lands may use well water for irrigation. The City of Sacramento estimates that parkland requires 4.3-acre feet/acre of water annually. Mitigation Measure 12.2 in 12. UTILITIES, requires a feasibility assessment of using groundwater under the site for irrigation of parks, landscaping, and open space areas at the project site. Mitigation Measure 12.2 requires a feasibility analysis of onsite groundwater use that includes an assessment of the potential for dewatering of the site. This analysis will be used to determine how much groundwater will be used on site to conserve treated water supplies. Some of the water used for irrigation of parkland will percolate back into the aquifer under the site and be available for reuse. The project's residential components shall be required to acquire treated drinking water from the City of Sacramento Department of Utilities, thereby reducing the use of groundwater at the site contributing to aquifer draw down, and dewatering under the site. Ground subsidence from project related aquifer draw down will be reduced to less-than-significant levels with mitigation.

#### D) Unique geologic and physical features?

The project site is located on accumulated alluvial deposits on the floodplain of the Sacramento River common to the area and contains no unique geologic features.

#### **Mitigation Measures**

**Proposed** 

None.

Recommended

None

#### **FINDINGS**

The proposed project is required to meet UBC standards for seismic safety and Title 15 of the Sacramento City Code standards for building construction, grading, erosion and sediment control and will therefore be subject to less-than-significant geologic and seismic hazards.

	Potentially	Potentially Significant Impact Unless	Less-than- significant
Issues:	Significant Impact	Mitigated	Impact
4. WATER	<u>r</u>		P
Would the proposal result in or expose people to potential impacts involving:			
A) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?		X	
B) Exposure of people or property to water related hazards such as flooding?			X
C) Discharge into surface waters or other alteration of surface water quality (e.g.,		N.	
temperature, dissolved oxygen or turbidity)?		X	Χ
D) Changes in currents, or the course or direction of water movements?			^
E) 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?			Х
F) Altered direction or rate of flow of groundwater?			Х
G) Impacts to groundwater quality?			X

#### **ENVIRONMENTAL SETTING**

In the Natomas Basin, where the proposed project is located, watersheds formed by the snow melt and runoff from the Sierra Nevada mountains flow out of the foothills near Roseville and Lincoln where it is captured by the Reclamation District 1000 (RD-1000) levees and canals. The RD-1000 system was originally constructed in the 1910s to control flooding and drain a large land area for agricultural use.

The RD-1000 is an extensive system of canals and pump stations that drain the greater South Natomas area, including the project site into the Sacramento River and protect much of the City from flooding. The main water drainage for the area is via the Natomas East Main Drainage Canal, or in the case of the project site, the Natomas Main Drainage Canal, whose levee forms the project's east boundary. Currently, the project site drains to a culvert along the east project boundary that carries water runoff from the site under Interstate 80 through a pipe that drains into the Natomas Main Drainage Canal on the other side of the freeway. Water in the Canal is lift pumped into the Sacramento River at a location south of the project site.

#### Surface/Groundwater

The project site is located within the Sacramento River Hydrologic Basin, as defined by the California Department of Water Resources (DWR). The Sacramento, American, and Consumnes Rivers are the main surface waters draining the greater Sacramento Valley region and recharge the aquifer system. Surface inflows to the east of the City Limits and percolation of precipitation and surface water applied to irrigated cropland recharge the aquifer system. Groundwater is depleted by pumped extractions of groundwater for municipal, industrial, and agricultural purposes. Groundwater levels in the Sacramento area have been declining since 1940. The pattern of pumping has continued over the years, and the rate of groundwater decline recently was estimated to be 1.5 feet per year (SGPU DEIR, W-9). Groundwater elevations at the project site were estimated using a DWR monitored well located approximately ½-mile northwest of the project site indicating groundwater elevations have fluctuated from a low of -0.5 feet Mean Sea Level (MSL) to a high of +12.6 feet MSL. Groundwater measurements are summarized on Plate 5 in the Environmental Site Assessment in Appendix 1 (WKA, 2003).

The Phase 1 reports the presence of one active water well serving the existing residence, and two inactive wells (presumably associated with the two former residential sites) whose exact location was not determined.

# **Water Quality**

Water quality of the area water system is affected by runoff from developed areas into storm drains and illegal dumping in area creeks and drainageways (SGPU DEIR, W-11). The SGPU DEIR includes a number of precautionary construction measures aimed at maintaining water quality (SGPU DEIR, W-16, 17). To protect water quality, suspended materials (such as oils and grease), sedimentation, and erosion into area surface waters must be eliminated. Controls include source control measures to prevent pollution of storm water and/or treatment controls designed to remove pollutants from storm water.

Section 402 of the Clean Water Act, regulates urban runoff into bodies of water through the National Pollutant Discharge Elimination System (NPDES) permit process. The NPDES process provides a regulatory mechanism for the control of non-point source pollution generated by construction activities, industrial activities, and general use of urban land, including runoff from streets. At the State and regional levels, implementation of the NPDES process is the responsibility of the State Water Resources Control Board (SWRCB), and the Central Valley Water Quality Control Board (RWQCB), respectively.

The City of Sacramento has obtained a general NPDES permit from the SWRCB jointly with the County of Sacramento and the cities of Folsom, and Galt. The goal of the permit is to implement actions to reduce pollutants found in urban storm runoff. The general permit requires the permittee to employ "Best Management Practices" (BMPs) before, during, and after construction.

Construction activities (such as clearing, grading, or excavation) involving a land disturbance greater than five acres must file a Notice of Intent with the Central Valley RWQCB to indicate their intent to comply with State General Construction Activity Storm water Permit conditions to minimize sediment and pollutant loading. This general permit requires all owners of land where construction activity occurs to:

- Eliminate or reduce non-storm water discharges to storm sewer systems and other waters;
- Develop and implement a storm water pollution prevention plan (SWPPP);

Perform inspections of storm water pollution prevention measures.

Additionally, construction-related sediment and erosion-control measures have been established under the NPDES permit overseen by the Central Valley RWQCB with the intent to reduce pollutants from entering the storm drain system and protect water quality in the City of Sacramento.

The City's Grading, Erosion, and Sediment Control Ordinance is set forth in Chapter 15.88 of the Sacramento City Code. Erosion and sediment control BMPs for the City of Sacramento have been developed, and are contained in the Administrative and Technical Procedures for Grading and Erosion and Sediment Control (City of Sacramento, 1994). The primary objective of the BMPs is to reduce non-point source pollution into waterways. These practices include structural and source control measures for residential and commercial areas and BMPs for construction sites. BMP mechanisms to prevent soil erosion and sediment transport, and prevent pollutants such as oil and grease from entering the storm water drains. Included in the list of BMPs are hydroseeding and matting for erosion control, and practices such as installation of straw bale barriers and inlet filters, silt fences, and sediment traps and basins for sediment control. The project applicant is required to construct the onsite stormwater drainage system (including the proposed drainage swalewater quality/detention basin) using BMP and BACT per the specifications in the Department of Utilities construction manual (the manual is available from the Department of Utilities, Engineering Services Division, 1395 35th Avenue, Sacramento, CA). BMPs are approved by Department of Utilities before construction can begin

The City of Sacramento's construction BMPs include provisions requiring:

- Maintenance of structures and roads;
- Flood control management;
- Comprehensive development plans;
- Grading, erosion and sediment control;
- Inspection and enforcement procedures;
- Educational programs for toxic material management;
- Placing mulch and reseeding/re-vegetating disturbed areas;
- Enforcing strict on-site soil handling rules;
- Collection and removal of pollutants such as petroleum products from the job site;
- Maintaining riparian vegetation to the maximum extent feasible;
- Using appropriate sanitation to avoid bacterial and nutrient contamination;
- Preparation of a spill prevention plan in the event of an accidental materials spill;
- Reduction of pesticide use; and

Site-specific structural and non-structural control measures.

# **Flooding**

Prior to the construction of the RD-1000 Canal and levee system, flooding occurred regularly in the Sacramento Valley (SGPU DEIR, W-3). Natural levees had developed along the creeks and rivers, but winter storms regularly caused overtopping of the banks and spreading of floodwaters across broad areas.

Subsequent to the construction of the levee system and recent upgrades, the project site now located in what is defined by the Federal Emergency Management Agency (FEMA) as <a href="mailto:an-a\_ean-

#### STANDARDS OF SIGNIFICANCE

Water Quality. For purposes of this environmental document, an impact is considered significant if the proposed project would substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increased sediments and other contaminants generated by construction and/or operation activities.

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

# A) CHANGES IN ABSORPTION RATES, DRAINAGE PATTERNS, OR THE RATE AND AMOUNT OF SURFACE RUNOFF?

The proposed project will construct 654 642 homes with roads and sidewalks creating impervious surfaces over much of the site. The addition of impervious surfaces in the form of concrete and asphalt will change the immediate onsite groundwater recharge rate, redirect drainage patterns across the project site, and increase the amount of surface water runoff from the site. The City of Sacramento Storm water Management Program is operated by the City Department of Utilities and publishes the *Guidance Manual for On-Site Storm water Quality Control Measures* containing source control, treatment control, and regional control measures for development in the City. The manual recommends mechanisms for reducing pollutants in storm water including water quality infiltration\_detention\_basins\_designed\_to\_retain\_storm water and allow it to infiltrate into the soil. Residential developments larger than fifty acres are a typical application site. Water quality basins are effective in removing bacteria, suspended solids, insoluble nutrients, oil and grease, and floating wastes. Infiltration basins reduce storm water pollutants through volume reduction, filtration, and settling. Onsite retention\_detention also allows groundwater recharge through percolation while reducing peak storm water runoff from impervious surfaces to less-than-significant levels.

The project proposal includes the construction of a ±1.42-acre water <u>quality/</u> detention basin in coordination with the City Department of Utilities. The basin is designed to accumulate storm water directed into it by the project drainage system. The system would <u>prevent-delay</u> storm water from moving off the project site, thereby reducing instances of off site flooding, and preventing materials suspended in storm water from moving off site. The water

quality/detention basin will have a capacity of up to four-acre feet, or approximately 1.3 million gallons of water, from a storm event. The water quality basin will meet City standards for water quality/detention basin construction. Storm water runoff from the project site will be reduced to less-than-significant levels with the construction of the water quality/detention basin.

#### B) EXPOSURE OF PEOPLE OR PROPERTY TO WATER RELATED HAZARDS SUCH AS FLOODING?

According to the SNCP, the entire South Natomas area, including the project site, was within the 100-year floodplain with a serious potential risk from flooding (SNCP, Page 35). Since the adoption of the SNCP, upgrades to the canal and levee system have improved the flood protection in the South Natomas plan area considerably. The Federal Emergency Management Agency (FEMA) is responsible for assessing and mitigating risks associated with floods. FEMA prepares Flood Insurance Risk Maps (FIRM) that delineates and maps for communities areas in the 100 to 500 year flood zones.

A regional effort to improve flood control prior to 2000 provided upgrades to levees and improved flood protection in an area including the project site. Prior to recent upgrades to the levee system, the project site was in a designated AR flood zone, which is applied to areas which have less than 100-year flood protection. The Canal adjacent to the project is a component of the regional flood control system and is located in a designated Zone A with no base flood elevations determined (pers. comm., Johnson-2004). The levee structure is now in a <a href="mailto:shaded">shaded</a>n X-Zone on the FEMA FIRM (updated May 2000), providing the project site with protection from a 500-year event. Since the site is protected by levees from a 100-year flood event or greater, it is at a less-than-significant danger from flooding.

# C) DISCHARGE INTO SURFACE WATERS OR OTHER ALTERATION OF SURFACE WATER QUALITY (E.G., TEMPERATURE, DISSOLVED OXYGEN, OR TURBIDITY)?

The applicant has proposed construction of a ±1.42-acre water quality detention basin onsite to assist provide for a place for materials to settle out of storm water runoff before leaving the site. The City Utility Department has determined the water quality/detention basin to be appropriate for the project site due to the onsite topography and soil types (pers. comm., Schamber-2004).

Development on the project site will be required to comply with the City's Storm water Management and Discharge Control Ordinance, Chapter 13.16 of the *Sacramento City Code* implementing controls to reduce the storm water pollution and discharges into City runoff.

The project will also be required to comply with the State National Pollution Discharge Elimination System (NPDES) general permit. To comply with the State Permit, the applicant will file a Notice of Intent with the State Water Resources Control Board (SWRCB) and prepare a Storm Water Pollution Prevention Plan (SWPPP) prior to construction. The SWRCB will approve the SWPPP providing it contains features designed to minimize construction related impacts to surface and ground waters. Preparation and SWRCB approval of the SWPPP will assure that surface water quality is not significantly impacted by implementation of the project. Discharge into surface waters associated with the project will be reduced to less-than-significant levels through compliance with regulatory requirements.

# D) CHANGES IN CURRENTS, OR THE COURSE OR DIRECTION OF WATER MOVEMENTS?

The project will be constructing a pedestrian bridge over the Canal. Specific designs for the bridge have not been submitted for review. The applicant has indicated the bridge will be designed to bolt to foundations placed on the tops of the Canal levees and above the mean high water line and span the entire Canal with out placing footings into the Canal itself. Mitigation Measure 4.1 requires the project obtain a permit from Reclamation District 1000 (RD-1000) for any bridge constructed across the Canal. Mitigation Measure 4.2 prohibits construction of trail and bridge facilities along the Canal's levee from occurring within the Canal bed, thereby avoiding a change in currents, or impeding the movement of water. Note: Mitigation Measure 7.12 requires the applicant to obtain a Streambed Alteration permit from the California Department of Fish and Game prior to construction of trails and bridge foundations on the Canal levee. Project related alteration to currents and water movement in the Canal will be less-than-significant with mitigation.

# E - 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, OR ALTERED DIRECTION OR RATE OF FLOW OF GROUNDWATER?

Water levels in the aquifer under the project site are influenced by seasonal weather conditions, the permeability of the soil, and the movement of water in the aquifer itself Construction of the project will increase the impermeable surfaces on the project site and thereby reduce direct infiltration and groundwater recharge onsite. However, permeable surfaces will remain allowing for onsite aquifer recharge, although onsite soils have slow permeability (USDA, 1993). Permeable surfaces at the site subsequent to construction that will allow some ground water recharge will include  $\pm 9.23 \pm 1.06$ -acres of parks and the  $\pm 1.432$ -acre water quality/detention basin.

Implementation of Mitigation Measure 12.2 As part of the Improvement Plan process, the city may (See 12. UTILITIES) requires the project applicant to demonstrate the feasibility of using wells to provide irrigation to the project parkland and open space areas reducing reliance on treated water. (See 12. UTILITIES) Using wIf used, well water for park and open space irrigation would increase groundwater withdraw at the site by approximately 4.2-acre feet/acre annually. If the project uses well water for irrigation, it will withdraw from the aquifer under the site. The use of well water instead of treated drinking water for irrigation requires no storage and conserves drinking water. Some of the water used to irrigate parks and open space on the project site will recycle to recharge the aquifer via percolation. The aquifer recharge potential of open space land at project site reduces the net onsite draw down of the aquifer to less-than-significant levels.

According to the Sacramento County Department of Public Works, Water Resources Division, the regional ground water flow is from east to west (WKA, 2003). Excavation during construction will not be at depths which could block or alter the direction or rate of flow of groundwater. The cuts and excavations necessary for placement of infrastructure to serve the project site, are temporary, of limited depth, will be replaced with engineered fill, and will therefore have less-than-significant effects on groundwater. The residential portion of the

project will be required to connect to the City water system and will therefore not be utilizing onsite groundwater.

#### G) IMPACTS TO GROUNDWATER QUALITY?

The one active and two inactive onsite wells, and three septic systems associated with the former onsite residences will be properly destroyed as required by Mitigation Measure 4.3. According to the project Phase 1, on site septic systems will pose no hazard to subsurface soils or groundwater at the project site subsequent to proper abandonment (WKA, 2003). Mitigation Measure 9.1 (See 9. HAZARDS), requires any excavation or any sampling activities that come within ten feet of groundwater to have a permit from the Environmental Management Department, Hazardous Materials Division (HMD). Potential impacts to groundwater quality are reduced to less-than-significant levels with mitigation and adherence to applicable regulations.

## **Mitigation Measures**

**Proposed Mitigation** 

None

# **Recommended Mitigation**

- Mitigation Measure 4.1: All bridges constructed over the Canal shall be required to obtain an encroachment permit from the Reclamation District 1000 (RD, 1000).
- Mitigation Measure 4.2: Construction of pedestrian bridges) and bridge foundations at the project site shall be prohibited from altering the Canal bed. Note: The Natomas Main Drainage Canal is a structure eligible for listing in the National Register of Historic Places due to its location, materials, and design. Any construction in the Canal bed will require a permit from the United States Army Corps of Engineers (PAR, 2004). (See 14. Cultural Resources)
- Mitigation Measure 4.3: The project applicant shall be required to acquire a permit(s), properly abandon and destroy all three onsite wells, and all three onsite septic systems in accordance with City and County standards for well and septic system abandonment.
- Mitigation Measure 7.12 The applicant shall obtain a Section 1602 Streambed Alteration permit from the California Department of Fish and Game prior to construction of bridge footings, foundations, and trails on the Canal levees. Note: A streambed alteration permit does not allow construction to alter the Canal bed. (See 14. CULTURAL RESOURCES Refer to Mitigation Measure 14.3)

### **FINDINGS**

The project will be required to comply with federal, State, and county water quality regulations and with the provisions and conditions of the City's Storm water Management and Discharge Control Ordinance implementing mitigation to reduce potential impacts to water quality to less-than-significant levels.

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

#### **ENVIRONMENTAL SETTING**

# **Physical Setting**

Sacramento County is one of eleven counties included in a region designated the Sacramento Valley Air Basin (SVAB). The SVAB is located in the Sacramento River valley northeast of the Sacramento River Delta and between the Pacific Coast Range to the west, the Sierra Nevada Mountains to the east, and the Cascade Mountain Range to the north. The climate in the SVAB is considered Mediterranean with mild, rainy winter weather from November through March, and warm to hot, dry weather from May through September. The population in the SVAB has increased approximately 51% over the last twenty years. The surrounding mountain ranges act to contain pollutant emissions within the valley when winds are light (California Air Resources Board, 2004).

The predominant annual wind pattern is from the Pacific Ocean breezes entering the valley through the San Francisco Bay area and the Sacramento River Delta. The predominant wind flow and speed in the Sacramento Valley is out of the south-southwest at 9.5 miles per hour. However, in winter the predominant winds are out of the north (California Air Resources Board, 2004).

Wind moving air through the SVAB allows for the dispersion and dilution of air pollutants. When air is not moving, such as in an inversion layer or in areas constrained by topography, air pollutants can collect and concentrate. Annually, the SVAB experiences a high number of days where atmospheric conditions lead to the formation of an inversion layer, causing stagnation of valley air and concentration of pollutants. Inversions occur when nighttime cooling of air near the valley surface and subsequent solar heating of air above traps the heavier cooled air. This inhibits vertical mixing of air and traps pollutants near ground level (California Air Resources Board, 2004).

# **Regulatory Setting**

The federal Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) review air quality data collected in the region to determine whether the SVAB complies with air quality standards established by the Federal Clean Air Act and the State Clean Air Act. The air quality standards are set based on the concentration of a given pollutant above which it is known to cause adverse health effects to sensitive groups within the population, such as children and the elderly. The determinations of compliance with the standards are expressed as attainment designations.

The EPA sets federal ambient air quality standards, while CARB sets state ambient air quality standards. The state ambient air quality standards are more stringent than the federal standards. In addition to setting and enforcing air quality standards, CARB enforces emissions standards in California, monitors air quality, provides education, and oversees compliance with standards through the local air quality districts.

The project site lies within the urbanized area of Sacramento County and is subject to federal, state, and local air quality regulations. CARB divides California into fifteen Air Basins. The Air Basins were established by grouping areas with similar geographic characteristics and political boundaries each to be overseen by an air quality district. The SVAB is under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD), which is responsible for implementing emissions standards and other requirements of federal and state laws.

CARB recently released a document called the *Air Quality and Land Use Handbook: A Community Health Perspective (approved by the CARB Board of Directors on April 28, 2005*). This document addresses potential cancer risks srelated to land uses proximate to freeways and other sources of toxic air contaminants. The exposure to toxic air contaminants associated with diesel particulates and other fuel-derived toxics is elevated adjacent to heavily traveled roadways. Air Pollution levels can be significantly higher within 500 feet of freeways and roadways with traffic volumes over 100,000 vehicles per day, or heavy-duty diesel truck volumes of over 20,000 trucks per day.

### Air Quality Standards

Ambient air quality standards define clean air. Specifically, air quality standards establish the concentration above which a pollutant is known to cause adverse health effects to sensitive groups within the population, such as children and the elderly. The amount of pollutants released and the atmosphere's ability to transport and dilute the pollutants affect a given pollutant's concentration in the atmosphere. Factors affecting transport and dilution include terrain, wind, atmospheric stability, and, for photochemical pollutants, sunlight (SMAQMD, 2004).

Both the federal EPA and CARB classify Sacramento County as being in non-attainment for ozone and  $PM_{10}$  (particulate matter less than ten microns in diameter). The region ranks as the twelfth worst area in the nation for ozone air pollution (SMAQMD, 2004). Specifically, the Sacramento Federal Ozone Nonattainment Area (SFNA) is designated a serious nonattainment area for the federal eight-hour Ambient Air Quality Standard (AAQS) for ozone, and is a serious non-attainment area for the state one-hour ozone standard. Sacramento County is also designated nonattainment with respect to the state and federal 24-hour  $PM_{10}$  air quality standards although

the four other air districts in the Sacramento region are designated attainment areas for the federal  $PM_{10}$  air quality standards.

Sacramento County is in attainment for all other state and national ambient air quality standards. Additionally, in June 2004, the federal EPA proposed to classify Sacramento County in attainment of the new federal PM<sub>2.5</sub> standard.

Due to the non-attainment designation for ozone standards, the federal Clean Air Act requires the air districts in the basin to adopt a plan for improving the air quality. The SMAQMD and other districts approved such a plan in 1994. The plan is titled the Sacramento Area Regional Ozone Attainment Plan, and is commonly referred to as the 1994 State Implementation Plan (SIP). The plan identifies a comprehensive regional strategy to reduce emissions to the level required for attainment of the federal standards.

#### STANDARDS OF SIGNIFICANCE

The SMAQMD has prepared the *Guide to Air Quality Assessment in Sacramento County,* July 2004. This Guide provides methodologies for the review of air quality impacts from development projects and identifies the criteria to measure the significance of potential impacts. There are three types of significance thresholds, as described below. In addition, the SMAQMD requires analysis of other potential impacts to air quality, such as emissions of Toxic Air Contaminants and the cumulative impacts of a project.

#### Mass Emission Threshold - Ozone Precursors

Ozone is an air pollutant that is not directly emitted. It is formed from complex chemical reactions between oxides of nitrogen (NOx) and reactive organic gasses and compounds (ROG). Therefore, control of ozone concentrations can be achieved through regulation of NOx and ROG emissions. Emissions of either pollutant could contribute to exceeding ozone standards. The SMAQMD defines a substantial contribution as one that exceeds the threshold levels in *Table 5.1* below.

Table 5.1
Significance Thresholds

	Ozone Precursor Emissions (pounds per day)		
Project Type	ROG	NOx	
Short-term Effects (Construction	None	85	
Long-term Effects (Operation)	65	65	

Source: SMAQMD

Note: There is no threshold of significance for ROG emissions during construction.

#### **Emission Concentration Threshold**

If a project generates substantial emissions of any pollutant, the project could contribute to a violation of the California Ambient Air Quality Standards (CAAQS) established by CARB. The CAAQS significance criteria are applied to all phases of a project in addition to the above mass emission thresholds.

#### **Substantial Contribution Threshold**

A project is considered to contribute substantially to an existing or projected violation of a CAAQS if it emits pollutants at a level equal to or greater than five percent of the CAAQS.

# Additional Sacramento Metropolitan Air Quality District Thresholds

#### **Toxic Air Contaminants**

A project would have a significant air quality impact if it will result in construction or operational emissions of toxic air contaminants (TACs) which cause a lifetime cancer risk greater than ten in one million (one in one million if "Best Available Control Technology", or BACT, is not applied), or ground-level concentrations of non-carcinogenic TACs with a Hazard Index greater than one. Special attention is given to asbestos emissions.

#### **Cumulative Impacts**

A project would have a significant air quality impact if:

- It requires a change in the existing land use designation (i.e., general plan amendment, rezone), and projected emissions (ROG, NOx or PM10) of the proposed project are greater than the emissions anticipated for the site if developed under the existing land use designation.
- Projected emissions (ROG, NOx), or emission concentrations (criteria pollutants), of the proposed project are greater than the emissions anticipated for the site if developed under the existing land use designation.

# Air Quality Plan Consistency

A project would have a significant air quality impact if it conflicts with or obstructs implementation of the applicable air quality plan.

#### **Odors**

A project would have a significant air quality impact if it results in excessive nuisance odors, as defined under the California Code of Regulations, Health & Safety Code Section 417001, air quality

## Sensitive Receptors

A project would have a significant air quality impact if it results in a land use which creates emissions that conflict with sensitive receptors, such as schools, elderly housing, hospitals or clinics, etc.

#### District Rules and Regulations

A project would have a significant air quality impact if it is not in compliance with all applicable District, state, or federal air quality rules and regulations.

## **Conformity**

A project would have a significant air quality impact if it does not comply with federal EPA general and transportation conformity regulations.

# **ANSWERS TO CHECKLIST QUESTIONS**

# A) VIOLATE ANY AIR QUALITY STANDARD OR CONTRIBUTE TO AN EXISTING OR PROJECTED AIR QUALITY VIOLATION?

The air quality standards applicable to the proposed project are the state and federal Ambient Air Quality Standards. Air pollutants would be emitted during the construction and long-term operation of the proposed project.

The proposed project includes construction of 654–642 single-family residences. The current SNCP land use designation for the site allows for up to a maximum of 710 homes (See *Table 1.2*), therefore project related emissions will be less than those anticipated in the SNCP.

#### **Asbestos**

If any naturally-occurring asbestos exists on the project site, it could be disturbed and become airborne during construction. The Phase 1 *Environmental Site Assessment, River Oaks Park,* August 2003, did not indicate ultramafic rock with asbestos content on the project site. The 1993 *Soil Survey of Sacramento County, California* did not identify the project site as having asbestos containing soils. Therefore the proposed construction will have a less-than significant-impact to air quality related to asbestos.

#### Construction

Construction of the project would generate air pollutants, such as dust emissions during grading; exhaust emissions from construction equipment, and off-gassing of pollutants from paving and application of paints and other architectural coatings.

Construction will be carried out in five phases described below:

- 5-05 to 3-06 Phase I Mass grade the entire site, construct infrastructure and 146 142 homes including model homes (173 homes);
- **3**-06 to 7-06 Construct Phase II infrastructure and 219208 homes;
- 7-06 to 11-06 Construct Phase III infrastructure and <del>114-115</del> homes;
- 11-06 to 3-07 Construct Phase IV infrastructure and 101 homes; and
- 3-07 to 8-07 Construct Phase V infrastructure and <del>74-76</del> homes.

Source: MRO October 11, 2004

Note: Construction periods are approximate and are subject to change.

SMAQMD determined that Mitigation Measures 5.2 through 5.5, and 5.7 shouldshall be selected as parameters of the modeling run (pers. comm., Christensen, 2004).

As a result, overall project emissions were reduced for each phase of the project, but still exceeded the significance thresholds set by SMAQMD (See *Table 5.2*). SMAQMD requires Mitigation Measure 5.6, which establishes a fee to be paid by the project applicant to compensate for project related air quality emissions exceeding district thresholds. The funds collected from developments are used by the SMAQMD to retrofit vehicles with emissions reducing equipment.

The fee amount is based on the quantity of pollutants emitted during project construction when the emissions exceed the SMAQMD thresholds. To calculate the total fee amount, SMAQMD uses the pounds per day the project is over the threshold (as determined by the URBEMIS modeling) multiplied by estimated construction days. This provides the total excess emissions associated with each project construction phase. The emissions for each phase are added together to find the total amount of emissions requiring mitigation, expressed as tons per year. Using the SMAQMD's standard mitigation fee of \$13,600 per ton multiplied by the number of tons of NOx projected by URBEMIS in excess of the threshold, the total mitigation fee for the River Oaks Park project is \$58,309. Upon payment of this fee and implementation of other mitigation measures, SMAQMD finds that project related emissions are reduced to less-than-significant levels (pers. Comm. Christensen, 2004).

Table 5.2

SMAQMD URBEMIS 2002 Modeling Results

Mitigated Construction Emissions All Phases and Mitigation Fee Calculation

Project Phase	Activity Phase	NOx (lbs/day) unmitigated	NOx (lbs/day) mitigated	NOx over threshold (lbs/day)	Duration (days)	Total significant NOx (lbs)
Phase I	Grading	227.04	181.63	96.63	26	2551.08
	Building Construction	72.94	58.35	0		0.00
Phase II	Grading	218.44	174.75	89.75	29	2566.91
	Building Construction	69.73	55.78	0		0.00
Phase III	Grading	218.24	174.59	89.59	13	1182.61
	Building Construction		0.00	0		0.00
Phase IV	Grading	218.40	174.72	89.72	13	1184.30
	Building Construction	84.01	67.21	0		0.00
Phase V	Grading	209.47	167.58	82.58	13	1090.00
	Building Construction	79.09	63.27	0		0.00
Total project NOx over threshold (lbs)						8574.91
Total proje	Total project NOx over threshold (tons)					4.29
Mitigation fee (\$13,600/ton)						\$58,309

Source: SMAQMD, URBEMIS 2002.

#### Operation

Types of emission sources associated with long-term operation of the project include mobile source emissions from vehicular traffic generated by the project and area sources such as water heaters, lawn maintenance equipment, and use of other consumer products. No fireplaces would be provided in any of the residential units. The only fireplace included in the proposed project would be a gas-log fireplace included in the clubhouse.

Modeling of the anticipated air pollutant emissions associated with long-term operation of the proposed project was completed using the URBEMIS 2002 computer program. The modeling included both mobile and area emission sources, and was completed for the year 2007 to reflect occupation of all proposed units. The results are presented in *Table 5.3*.

Table 5.3
Unmitigated Operational Emissions

Pollutant	E	(pounds	s by Season Is per day) nr 2007		Totals (Stationary plus Mobile)	
	Statio	nary	Mob	ile		
	Summer	Winter	Summer	Winter		
ROG	33.39	32.69	55.69	53.93	89.08	86.62
NOx	8.50	8.40	51.12	79.81	59.63	88.21
СО	9.88	3.57	587.34	626.91	597.22	630.48
PM <sub>10</sub>	0.03	0.02	48.10 48.10		48.12	48.11
SO <sub>X</sub>	0.19	0.00	0.32	0.28	0.51	0.28

Source: URBEMIS 2002

Based on the total emission amounts, summertime emissions of ROG and both summer and winter emissions of NOx exceed the SMAQMD's thresholds for these pollutants. Mitigation measures available in the URBEMIS program must be implemented to minimize the emission amounts. For this project, the following mitigation measures were selected:

- Sidewalks/Paths Most Destinations Covered
- Street Trees Provide Shade Moderate Coverage
- Pedestrian Circulation Access Some Destinations
- Visually Interesting Uses Some Uses within Walking Distance
- Pedestrian Safety from Crime Some Degree of Safety
- Transit Service 31-60 Minute Bus within ¼ mile
- Interconnected Bikeways Low Coverage
- Bike Routes Provide Paved Shoulders Few Routes
- Safe Vehicle Speed Limits Few Destinations
- Uses within Cycling Distance Some Uses
- Project Provides Sidewalks and Pedestrian Paths
- Project Provides Bike Lanes/Paths

After accounting for the effects of these mitigation measures, the anticipated pollutant emissions associated with motor vehicle use were reduced slightly, as shown in *Table 5.4*.

Table 5.4
Mitigated Operational Emissions

	Emissions by Season (pounds per day) Year 2007			Totals (Stationary plus			
Pollutant	Statio			Mobile			
Summer		Winter	Summer	Winter	Summer	Winter	
ROG	33.39	32.69	54.18	52.10	87.57	84.79	
NOx	8.50	8.40	49.37	77.06	57.87	85.46	
СО	9.88	3.57	567.08	605.61	576.96	609.18	
PM <sub>10</sub>	0.03	0.02	46.43	46.43	46.46	46.45	
SO <sub>X</sub>	0.19	0.00	0.31	0.31 0.27		0.27	

Source: URBEMIS 2002

The total mitigated emissions of summertime ROG, summertime NOx, and wintertime NOx exceed the SMAQMD thresholds by approximately twenty pounds per day after implementation of the mitigation measures. Additional mitigation measures are proposed below to ensure that these emissions are minimized. SMAQMD has determined that implementation of mitigation measure 5.1 would be sufficient to reduce project related operational emissions to less-than-significant levels (pers. comm., Christensen, 2004).

#### B) EXPOSURE OF SENSITIVE RECEPTORS TO POLLUTANTS?

Land uses such as schools, hospitals, and convalescent homes are considered sensitive receptors. Children, people with illnesses, and the elderly are sensitive to air pollutants. Air pollutants can lead to respiratory illnesses such as asthma, and leave sensitive receptors vulnerable to infections. Recreational land uses are moderately sensitive to air pollution, because vigorous exercise puts demand on the respiratory system.

Sensitive land uses in the vicinity of the project site include residential neighborhoods and Barandas Park to the east across the Canal, and new residences south across West El Camino Avenue. Leroy Greene Middle School and Two Rivers Elementary School are other sensitive receptors located approximately ¼ mile from the project site near the intersection of Orchard Lane and West River Drive.

The SMAQMD has approved the applicant proposed Mitigation Measure 5.1 to reduce operational emissions at the project site to the extent practicable. SMAQMD is also requiring Mitigation Measures 5.2 through 5.7 addressing construction emission and requiring compensation from the applicant are also required to reduce potential air quality impacts. Since the project with mitigation is consistent with SMAQMD plans and policies, potential project impacts to sensitive receptors are reduced to the extent practicable and are therefore less-than significant

The project must comply with Mitigation Measures 5.1 proposed by the applicant and approved by SMAQMD, and Mitigation Measures 5.2 through 5.7, required by SMAQMD—to reduce project related construction and operations emissions to the extent practicable. According to the

SMAQMD, eEmissions associated with the proposed project will be less-than-significant with mitigation.

## C) ALTER AIR MOVEMENT, MOISTURE, OR TEMPERATURE, OR CAUSE ANY CHANGE IN CLIMATE?

The project does not propose to construct large buildings which could alter or impede air movement. The project does include areas of pavement which could retain heat and locally raise the temperature of the air. The project is residential and does not contain industrial components that could raise air temperature. The project will not contribute to changes in air moisture by use of evaporative ponds. The ±1.42-acre water quality retention detention pond will contain water subsequent to rain events when air moisture is already high and will therefore not substantially introduce moisture into the air. Therefore, the project is expected to have a less-than-significant impact to air movement, moisture, or local climate.

## D) CREATE OBJECTIONABLE ODORS?

The project is comprised of residential and park use and is not expected to generate objectionable odors usually associated with agricultural, heavy commercial or industrial uses. The project will create residential and recreational uses consistent with adjacent land uses. Therefore, project related odors would have a less-than-significant impact to surrounding land uses.

#### **MITIGATION MEASURES**

#### **Proposed**

Mitigation Measure 5.1: This mitigation measure contains twelve emission reduction factors identified by the project applicant from the Sacramento Metropolitan Air Quality Management District Guide to Air Quality Assessment: Appendix E-Operational Emissions Mitigation, July 2004. Each of the listed items provides a credit to the project as an emissions reduction factor.

- The entire project is located within a ½ mile of an existing Class 1 or Class 2 bike land and provides a comparable bikeway connection to that existing facility.
- Setback distance is minimized between development and existing transit, bicycle, or pedestrian corridor.
- Average residential density is seven dwelling units per acre or greater.
- Multiple and direct street routing (grid style).
- Mixed use has at least three of the following on site and/or within ¼ mile: residential development, retail development, personal services, open space, or office.
- Neighborhood serving as focal point with parks, school, and civic uses within ¼ mile.
- Separate, safe, and convenient bicycle and pedestrian paths connecting residential, commercial, and office uses.

- The project provides a development pattern that eliminates physical barriers such as walls, berms, landscaping, and slopes between residential and non-residential uses that impede bicycle or pedestrian circulation.
- Install lowest emitting commercially available fireplaces. NOTE: All homehomes in the project will have no fireplaces.
- Install ozone destruction catalyst on air conditioning systems, in consultation with SMAQMD.
- Comply with SMUD Advantage Plus (Tier III) or EPA/DOE Energy Star Home energy standards.

Include permanent Transportation Management Association membership and funding requirement. Funding to be provided by Community Facilities District or County Service Area or other non-revocable funding mechanism.

#### Recommended

Mitigation Measures 5.2, 5.3, 5.4, and 5.5 are the standard mitigations from in the Sacramento Metropolitan Air Quality Management District Guide to Air Quality Assessment: Appendix F- Construction Emissions Mitigations, July 2004.

## SMAQMD Category 1: Reducing NOx emissions from off-road diesel powered equipment:

- Mitigation Measure 5.2 The project shall provide a plan for approval by the City of Sacramento and SMAQMD, demonstrating that the heavy-duty (>fifty horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average twenty percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction.
- Mitigation Measure 5.3: The project applicant shall submit to the City of Sacramento and SMAQMD, a comprehensive inventory of all off-road construction equipment, equal to or greater than fifty horsepower, that will be used an aggregate of forty or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any thirty-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

# SMAQMD Category 2: Controlling visible emissions from off-road diesel powered equipment:

Mitigation Measure 5.4: The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed forty percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40

# RIVER OAKS PARK INITIAL STUDY

percent opacity (or Ringelmann 2.0) shall be repaired immediately, the City of Sacramento and SMAQMD, shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any thirty-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations.

## SMAQMD Category 3: Controlling reactive organic gasses (ROG) and volatile organic compound (VOC) emissions from architectural coatings:

Mitigation Measure 5.5: Architectural coatings used in construction can be significant contributors of ROG, and wherever possible low-ROG and low-VOC architectural coating products shall be specified for use.

## Additional **SMAQMD**-required mitigation measures

- Mitigation Measure 5.6: The applicant shall pay fees to the Sacramento Metropolitan Air Quality Management District in the amount of \$58,309, or \$13,600 per ton of mitigated NOx emissions beyond the district NOx construction significance threshold, to compensate for the cost of providing vehicle retrofit equipment to reduce vehicle emissions within the district.
- Mitigation Measure 5.7: The project shall be constructed in five separate phases as indicated in the project description. Any variation in the construction phasing must receive prior approval from the City of Sacramento and the Sacramento Metropolitan Air Quality District.

**Findings:** The project, with mitigation from the Sacramento Metropolitan Air Quality Management District implemented, complies with the air quality plan and ambient air quality standards applicable to the project site.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than- significant Impact
6.	Χ		
TRANSPORTATION TRAFFIC/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)?			X
C) Inadequate emergency access or access to			
nearby uses?			X
D) Insufficient parking capacity on-site or off-			
site?			X
E) Hazards or barriers for pedestrians or			
bicyclists?			X
F) Conflicts with adopted policies supporting			
alternative transportation (e.g., bus turnouts,			
bicycle racks)?			X
G) Rail, waterborne or air traffic impacts?			X

#### **ENVIRONMENTAL SETTING**

**Roads**. The proposed project is located just east of northern terminus of Orchard Lane and north of West El Camino. Orchard Lane is a two-lane road that connects to West El Camino on the north and Garden Highway on the south. West El Camino is an arterial running east/west in the vicinity of the project area. Freeway access is provided via West El Camino to Interstate 80 and Interstate 5.

Public Transportation. Sacramento Regional Transit is the major public transportation service provider within Sacramento County providing 20.6 miles of light rail service and fixed-route bus service on 77 routes covering a 418 square-mile area, 7 days a week, 365 days a year. Currently there is no bus or light rail service existing within the immediate vicinity of the project site, however, bus service to the area is provided by Regional Transit bus lines 88 and 89. Route 88 travels from the Arden/Del Paso Light Rail Station down West El Camino to Gateway Oaks Drive. From Gateway Oaks Drive, the route then heads east on Garden Highway, and south down Interstate 5 to loop through Downtown Sacramento. Bus Route 89 also provides two morning buses from downtown to the Gateway Oaks area and two afternoon/evening buses from Gateway Oaks to Downtown during weekdays.

*Bikeways*. Currently there are no bikeways located on the project site. On-street bikeways are proposed along West El Camino and Orchard Lane. An off-street bike trail is proposed along the western edge of the Natomas Main Drainage Canal.

*Parking.* The project site is vacant fallow agricultural land; there is no parking located on the project site.

#### STANDARDS OF SIGNIFICANCE

## Roadways: 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.
- For facilities operating at LOS D, E or F without the project, an impact is considered significant if the project increases the v/c ratio by 0.02 or more.

## Intersections: A significant traffic impact occurs under the following conditions:

- The addition of project-generated traffic causes the level of service of the intersection to change from LOS A, B, or C to LOS D, E or F.
- The addition of project-generated traffic increases the average stopped delay by five seconds or more at an intersection already operating worse than LOS C.

## Bicycle Facilities:

- A significant Bikeway impact would occur if the project hindered or eliminated an existing designated bikeway, or if the project interfered with implementation of a proposed bikeway.
- The project is to result in unsafe conditions for bicyclists, including unsafe bicycle/pedestrian or bicycle/motor vehicle conflicts.

#### Pedestrian Facilities:

A significant pedestrian circulation impact would occur if the project would result in unsafe conditions for pedestrians, including unsafe increase in pedestrian/bicycle or pedestrian/motor vehicle conflicts.

#### Transit Facilities:

A significant impact to the transit system would occur if the project-generated ridership, when added to existing or future ridership, exceeds available or planned system capacity. Capacity is defined as the total number of passengers the system of busses and light rail vehicles can carry during the peak hour of operation.

## Parking:

A significant impact to parking would occur if the anticipated parking demand of the proposed project exceeds the available or planned parking supply for typical day conditions. However, the impact would not be significant if the project is consistent with the parking requirements stipulated in the City Code.

## **ANSWERS TO CHECKLIST QUESTIONS**

## A) INCREASED VEHICLE TRIPS OR TRAFFIC CONGESTION?

The development of the proposed project would increase vehicular traffic on the roadway network within the project area. The project generated traffic is likely to create potentially significant traffic impacts to some of the project area intersections and roadway segments. Based on the review of the Baseline operating traffic conditions within the project area and the capacity of the project area roadway system it appears that some of the potential traffic impacts of the proposed project may be significant and unavoidable as per the City's standards of significance for traffic impacts.

In view of the above and in accordance with the requirements of the California Environmental Quality Act (CEQA), the City has decided an environmental impact report (EIR) needs to be prepared to address the potentially significant impacts of the proposed project on transportation traffic and circulation.

# B) HAZARDS TO SAFETY FROM DESIGN FEATURES (E.G., SHARP CURVES OR DANGEROUS INTERSECTIONS) OR INCOMPATIBLE USES (E.G., FARM EQUIPMENT)?

Public improvements required for the project will be designed to appropriate standards. Therefore, creation of hazards is not expected and no Mitigation is required.

## C) INADEQUATE EMERGENCY ACCESS OR ACCESS TO NEARBY USES?

Existing road infrastructure provides adequate emergency access to the proposed project site. The project site will be designed to appropriate standards, to the satisfaction of the City of Sacramento Development Services Department, Development Engineering and Finance Division and the Fire Department. Potential emergency access impacts are considered to be less-than-significant and do not require mitigation.

## D) INSUFFICIENT PARKING CAPACITY ON-SITE OR OFF-SITE?

Currently there is no parking available at the site as it is vacant land previously used for agriculture. Parking will be provided for the residential uses in accordance with the City Zoning Code, Chapter 17.62. Therefore, impacts associate with parking are anticipated to be less-than-significant.

## E) HAZARDS OR BARRIERS FOR PEDESTRIANS OR BICYCLISTS?

The proposed project may increase potential bicycle/pedestrian or bicycle/motor vehicle conflicts. However, the frontage improvements along the project site will include sidewalks to appropriate standards to the satisfaction of the City of Sacramento, Development Services Department, Development Engineering and Finance Division. In addition, the proposed project driveways along with sidewalks, curbs, and gutters shall be designed in accordance with City standards to the satisfaction of the City of Sacramento, Development Services Department, Development Engineering and Finance Division. Impacts arising from potential

bicycle/pedestrian or bicycle/motor vehicle conflicts are therefore considered less-thansignificant and no mitigation is required.

# F) CONFLICTS WITH ADOPTED POLICIES SUPPORTING ALTERNATIVE TRANSPORTATION (E.G., BUS TURNOUTS, BICYCLE RACKS)?

The proposed project is being designed to accommodate the use of alternative transportation. The use of pedestrian walkways and bike lanes will be located throughout the site and connecting to the existing bike trails along the Natomas Main Drainage Canal as identified in the City's Bikeway Master Plan. Therefore, it is not anticipated that the proposed project will conflict with adopted policies supporting alternative transportation.

## G) RAIL, WATERBORNE OR AIR TRAFFIC IMPACTS?

The project is not in a location that it would affect or be impacted by rail, waterborne or air traffic. Therefore, a less-than-significant impact associate with rail, waterborne, or air traffic is anticipated.

#### **MITIGATION MEASURES**

Measures will be addressed in the EIR.

### **FINDINGS**

There is a potential for significant impacts associated with the increased vehicle trips. These impacts will be addressed in the environmental impact report.

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)?		X	
B) Locally designated species			
(e.g., heritage or City street trees)?		X	
C) Wetland habitat (e.g., marsh, riparian			
and vernal pool)?		X	

#### **ENVIRONMENTAL SETTING**

The proposed project site is located in the South Natomas Community in the City of Sacramento, approximately one mile northeast of the Sacramento River. The site is within the Natomas Basin,

a low-lying region in the Sacramento Valley, located east of the Sacramento River and north of the American River. The Natomas Basin contains incorporated and unincorporated areas within the jurisdictions of the City of Sacramento, Sacramento County, and Sutter County. Historically the basin was primarily in agricultural production. The water conveyance systems within the Natomas Basin were constructed to transport water and provide drainage. They also provide nesting, feeding, and migration corridor habitat for a variety of species in the basin.

The proposed River Oaks project site consists of two components: the area that will support the proposed residential development with associated improvements and the area that will support the proposed levee trail and the pedestrian bridge over the Natomas Main Drainage Canal. The area proposed for the residential development consists of ±80-acres and is bound by Interstate 80 to the north, West El Camino Avenue to the south, the Main Natomas Drainage Canal (Canal) to the east, and Orchard Lane to the west. The proposed pedestrian bridge would be located approximately ±700 feet south of Interstate 80; Gateway Oaks Drive is located directly east of the proposed bridge location. The bridge will span the Canal with each end of the bridge placed on the top of the levees providing a connection to the trail along its top. Each of these two project site areas currently support unique biological communities and, therefore, represent different impacts relating to biological resources. However, as they are both part of the proposed project, they are discussed in conjunction below.

#### Site Assessments

Biological site assessments for the proposed project were conducted by North Fork Associates on July 8, 2003 and October 13, 2004. The 2003 site survey covered the ±80-acre area proposed for residential development. The site was surveyed in order to identify and map plant communities and wildlife, jurisdictional waters of the United States, and special-status plant and wildlife species, including any habitat present within the project area. In addition, adjacent properties, although not walked, were scanned with binoculars for the presence of wildlife species that could be impacted by proposed activities on the site. The 2003 *Biological Resources Assessment* is included in Appendix 3.

During the July 2003 field survey, the ±80-acre property was delineated by North Fork Associates according to the 1987 Corps Manual for Delineating Wetlands. The delineation was verified by the Army Corps of Engineers (Corps) on February 14, 2004 (identification # 200300696) which concurred that no waters of the United States exist on the property. The Wetland Delineation is included in Appendix 4 and the verification letter is included in Appendix 5.

The 2004 Biological Resource Assessment for the River Oaks Park Pedestrian Bridge Alignment surveyed the area proposed for the pedestrian bridge. The Canal is approximately 130 feet wide from top-of-levee bank to top-of-levee bank. Each bank is approximately 5 feet tall with a slope of 3:1. The proposed pedestrian bridge would span the Canal, approximately 700 feet south of Interstate 80. According to development plans, the bridge will be supported by two foundations located on top of the Canal levees. The site was surveyed in order to identify and map plant communities and wildlife as well as special-status plant and wildlife species including their habitat present within the project area. Since the proposed pedestrian bridge will be placed on top of the levees and outside of the ordinary high water mark of the Canal, the bridge is not anticipated to impact waters of the United States; therefore, jurisdictional waters of the United States were not delineated for the pedestrian bridge project component. The 2004 Biological Resource Assessment for the Pedestrian Bridge Alignment is included in Appendix 6.

In September 2004, North Fork Associates conducted a *Certified Arborist Assessment* of the ±80-acre property proposed for residential development (Appendix 7). The trees were assessed for their species, size, health and structure. A determination was made as to whether the onsite trees are considered Heritage Trees according to the City of Sacramento (City Code, Chapter 12.64.020). Potential tree impacts were assessed during the biological resource assessment for the pedestrian bridge (see Appendix 6).

## Vegetation

The entire Natomas Basin contains a variety of habitat types: open water aquatic habitat (including ditches and drains), emergent marsh, riparian forest, riparian scrub-shrub, grassland, vernal pools, and agriculture. A number of special-status species (wildlife and plant), as determined by the California Department of Fish and Game (CDFG) or the U.S. Fish and Wildlife Service (USFWS), inhabit or forage within the Natomas Basin.

The majority of the ±80-acre River Oaks Park proposed residential site supported row crop agriculture. The main crops were sweet corn, tomatoes, and peppers. However, as of October 2004, the agricultural fields lay fallow. In addition to the row crops, the vegetation on the property consists of three small clusters of trees. These are located along the western property boundary, and at two likely former residence locations, one near the center of the property and another to the south along West El Camino Avenue. Refer to the aerial photograph in Figure 1.3.

The ±80-acre project site supports approximately a dozen trees, including almond, walnut, white mulberry, California sycamore, Grecian bay, and olive. An assortment of non-native grasses and weeds volunteer on the roads and borders of the cultivated areas. These consist primarily of invasive species adapted to frequent disturbance such as peppergrass, black mustard, hedge parsley, turkey mullein, pigweed, Italian ryegrass, field bindweed, johnsongrass, and ripgut brome. The complete list of the plant species observed on the property during the July 2003 field survey can be found in Appendix 3.

The Natomas Main Drainage Canal levee forms the eastern border of the area proposed for residential development and is the location of the proposed pedestrian bridge. West of the Canal is a shallow irrigation ditch and road berm, followed by fallow fields. East of the Canal is open ground and an asphalt path, followed by development. Vegetation on the east side of the Canal is dominated by Himalayan blackberry with portions of woody vegetation including Goodding's willow, valley oak, and California walnut. Herbaceous species in this area include ripgut brome, autumn willowweed, and hedge parsley. Vegetation on the west side of the Canal consists of weedy non-native species such as field bindweed, Bermuda grass, geranium, and common mallow. Occasional clusters of willow, oak, and walnut occur south of the bridge alignment. At the water's edge, tall flatsedge and curly doc are more common. No wetlands or vernal pools occur within 250 feet of the proposed pedestrian bridge location.

## Heritage Trees

Heritage Trees are native oak (*Quercus* spp.) trees, California Buckeye (*Aesculus california*) and California sycamore (*Plantanus racemosa*) trees with a diameter-at-breast-height (dbh) of approximately 12 inches or greater, non-native trees with dbh approximately 32 inches or greater, trees in riparian zones with dbh of approximately 12 inches or greater, or trees designated by resolution of the Sacramento City Council to be of special historical or environmental value or of significant community benefit (Sacramento City Code, Chapter 12.64.020).

The Certified Arborists Assessment (Appendix 7) concluded that five Heritage trees occur on the ±80-acre property. These consist of one California walnut totaling 44 inches dbh, one white mulberry totaling 45.5 inches dbh, two London Plane trees (36 and 42 inches dbh), and one English walnut totaling 59 inches dbh. None of these trees were rated as good in both health and structure. The Biological Resource Assessment for the Pedestrian Bridge Alignment (Appendix 6) noted that two dying California walnut trees would be removed as part of the pedestrian bridge project. Since these walnut trees are approximately 12 inches dbh and are located within the riparian area adjacent to the canal, they are considered Heritage Trees.

#### Wildlife

Wildlife on and immediately adjacent to the property is confined almost exclusively to the riparian corridor along the levee, with only a few avian species utilizing the trees in the three non-cultivated areas in the agricultural field. Wildlife from the riparian corridor undoubtedly forages in and over the agricultural areas, although very few species were seen during the July 2003 field survey. Most of the wildlife seen during the 2003 survey were avian species that nest in the riparian woodland and forage over the Canal and the field. Most commonly observed were northern rough-winged swallows, tree swallows, northern mockingbird, mourning dove, black phoebe, and European starling. During the 2003 survey, the only evidence of mammal's onsite was scat from a raccoon, scat from either a black-tailed jackrabbit or cottontail rabbit, and a few small holes made by burrowing rodents, although it is likely that several other species inhabit the riparian corridor. No reptiles or amphibians were observed. A list of the wildlife species observed on the property during July 2003 field survey (either directly or indirectly) can be found in Appendix 3.

The 2004 biological assessment for the pedestrian bridge determined that resources for wildlife on the pedestrian bridge project site include aquatic, riparian, and ruderal grassland communities. The Natomas Main Drain Canal is a controlled aquatic system, although suitable habitat for some species does exist within the Canal. A few mallard and one American beaver were observed in the channel; several fish and amphibian species are likely to occur there. The riparian habitat is mostly Himalayan blackberry scrub and occurs primarily along the eastern bank of the Canal. Species observed in the blackberry thickets include Bewick's wren, black phoebe, spotted towhee, song sparrow, and black-tailed jackrabbit. Birds observed in the trees along the Canal include mourning dove, tree swallow, American robin, northern mocking bird, orange-crowned warbler, and Brewer's blackbird. The ruderal grassland is located on the west side of the Canal; no additional species were observed in this area.

During the 2004 survey, a few burrows were observed on the west side of the Canal, although no signs of burrowing owls were observed. No burrows were observed on the banks of the Canal within the project area. One nest suitable for a raptor is located in a walnut tree south of the proposed bridge location, on the west side of the Canal. No raptors were observed during this assessment, although red-shouldered hawks have been observed on the project site previously.

### Sensitive Species

The 2003 Biological Resource Assessment indicated that, based on queries of various special status species databases (including the California Natural Diversity Database (CNDDB)), 14 plant and 57 animal special status species could occur within the 9 USGS quadrangle project vicinity (an

approximately 500 square mile area). However, only 19 of these special status species were determined to have any potential to occur on or use the project site. Refer to Table 1 in Appendix 3.

During the July 2003 survey, no special status species were observed on or immediately adjacent to the site. Nevertheless, the Swainson's hawk, is known to nest nearby and could use the property for foraging after it has been cropped (see discussion below regarding active Swainson's hawk nests near the project site). The site assessment determined that of the 19 species that have any potential to occur onsite, the Swainson's hawk could potentially use the property for foraging and the valley elderberry longhorn beetle, giant garter snake, and/or the northwestern pond turtle could occur in the Canal or riparian zone adjacent to the property. The remainder of the 19 species was determined to either have no potential for occurrence or be unlikely to occur to do unsuitable habitat on the property.

No special status species were observed during the 2004 survey for the pedestrian bridge. The 2004 biological resource assessment concluded that within the area of the proposed pedestrian bridge, there is suitable habitat for the giant garter snake, northwestern pond turtle, and Swainson's hawk. The assessment ruled out impacts to the valley elderberry longhorn beetle (VELB) and burrowing owl. Several elderberry shrubs (exclusive host plant of VELB) occur along the Canal, although none are within 100 feet of the proposed bridge location. No burrowing owls were observed on site; a few burrows were observed on the top of the Canal bank on the west side, but no signs of burrowing owls were observed. Following is a discussion of the giant garter snake, northwestern pond turtle, and Swainson's hawk.

<u>Giant garter snakes (Thamnophis gigas)</u> are listed as a threatened species by both the federal and state governments. They inhabit marshes, ponds, and low gradient streams with emergent vegetation. They require permanent water to support their aquatic prey (fish, amphibians, and smaller snakes). Upland refugia are also required for basking, cover, and retreat from floodwaters, with burrows for hibernation during their dormant winter period. Giant garter snakes typically are absent from larger rivers and fast moving streams or streams with large populations of predatory fish. They also tend to avoid habitats with sand or gravel substrates.

Giant garter snakes adapt well to man-made waterways such as the Natomas Basin's system of Canals and drains. Within the basin, they are highly correlated with rice fields and their associated water supply and drainage facilities. They do use irrigation Canals and field drains, both as habitat and as movement corridors when these contain sufficient water to supply food and cover, grassy banks for basking, and emergent or waterside vegetation for cover and escape.

No garter snakes were observed in the Canal in the project area during the 2003 or 2004 field reconnaissance surveys but the Canal and streamside banks appear to offer suitable habitat for the species. However, the ±80-acre area proposed for residential development provides no suitable habitat. The on-farm irrigation and drainage systems are too small and too intermittent, and offer none of the essential food and cover components. The property is also too disturbed to serve as a winter retreat. If they do occur in the area, their presence would be limited to the Canal and adjacent levee.

<u>Northwestern pond turtles (Clemmys marmorata marmorata)</u> are considered a species of concern by the Fish and Wildlife Service and a species of special concern by the California Department of Fish and Game. These turtles occur throughout California, west of the Cascade-Sierra crest.

Northwestern pond turtles are associated with ponds and waterways in grassland, oak woodland, and coniferous forest. This highly aquatic reptile inhabits quiet waters of ponds, marshes, creeks, and irrigation ditches. Optimal habitat contains deep pools and streamside vegetation for cover and rocks, logs, and open mud banks for basking. Adjacent upland habitats with burrows or dense vegetation are used for winter hibernation and for egg laying. The Natomas Main Drainage Canal and the waterfront slope of the levee in the project area appear to offer suitable habitat for the species but none were observed during 2003 or 2004 field investigation. Further, the high intensity agricultural activity on the ±80-acre property adjacent to the Canal certainly would limit any likelihood of the species using the project site west of the Canal.

Swainson's hawk (Buteo swainsonii) is a state-listed threatened species and a federal species of concern. They are found in grasslands, riparian habitats, and agricultural areas with large but scattered trees with dense canopies. They prefer trees that offer a panoramic view of their foraging grounds, primarily grasslands and open fields that provide a dependable supply of the rodents, insects, and small birds and reptiles on which they prey. If necessary, they will travel substantial distances from nest sites to foraging grounds. They are frequently seen foraging behind farm equipment, capturing rodents exposed by ground disturbing activities. Swainson's hawks were observed during the 2003 or 2004 field reconnaissance surveys of the project site nor were any active nests located on the site or in areas immediately adjacent. According to the Conservancy's 2003 Annual Survey Results of the Nesting Swainson's Hawks in the NBHCP, a nest site was known from directly across the Canal from the project area but has not been active for several years, probably due to the recent development of the area in proximity to the nest. However, there is a currently active nest site located approximately 1/4 mile west of the southwest corner of the River Oaks Park property. It is likely that these birds occasionally forage on the property, primarily during and after cropping. While the proposed project would have little or no impact on the species directly, there would be some loss of foraging opportunity. According to the Natomas Basin Habitat Conservation Plan, lowgrowing row crops, such as tomatoes and peppers, provide foraging habitat of moderate value, while taller crops such as corn provide low value habitat.

## **Regulatory Setting: The Natomas Basin Habitat Conservation Plan**

The 1994 North Natomas Community Plan required the development and implementation of a Habitat Conservation Plan (NBHCP) as mitigation for development in North Natomas and the Natomas Basin, which includes portions of land in South Natomas as well. The proposed project is located in an area of South Natomas that is required to comply with all measures identified in the NBHCP. Any development on the River Oaks property will be subject to the plan's conditions. The NBHCP is a conservation plan supporting application for incidental take permits (ITPs) under Section 10(a)(1)(B) of the Endangered Species Act (ESA) and under Section 2081 of the California Fish and Game Code. The ESA, under Section 9, prohibits the take of any fish or wildlife species listed as endangered or threatened, including the destruction of habitat that prevents the species' recovery.

The purpose of the NBHCP is to promote biological conservation in conjunction with economic and urban development within the Permit Areas of the Natomas Basin. The NBHCP establishes a multi-species conservation program to minimize and mitigate the expected loss of habitat values and incidental take of Covered Species that would result from urban development, operation of irrigation and drainage systems, and certain activities associated with The Natomas Basin Conservancy (TNBC) management of its system of reserves established under

the NBHCP. The goal of the NBHCP is to minimize incidental take of the Covered Species in the Permit Areas and to provide mitigation for the impacts of Covered Activities on the Covered Species and their habitat. The NBHCP applies to the 53,537-acre area interior to the toe of the levees surrounding the Natomas Basin.

In 1997, the NBHCP was approved by the City of Sacramento and ITPs were issued to the City by USFWS and CDFG. Subsequently, the 1997 NBHCP was challenged and on August 15, 2000, the U.S. District Court, Eastern District, ruled that the USFWS ITP was invalid and an EIS was required.

The City of Sacramento, Sutter County and the USFWS prepared a revised NBHCP and an EIR/EIS that were approved on May 13, 2003 by the City of Sacramento City Council. On Friday, June 27, 2003, the USFWS issued ITPs to the City of Sacramento, Sutter County and The Natomas Basin Conservancy. CDFG issued an amended ITP on July 10, 2003.

The NBHCP requires that the applicant for a City project comply with all the measures in the NBHCP including payment of mitigation fees and compliance with applicable avoidance, minimization, and mitigation measures. Each covered species under the NBHCP has avoidance, minimization, and mitigation measures ("Conservation Measures") that must be met when they (including their habitat) may be potentially impacted as determined during reconnaissance surveys. The reconnaissance surveys also determine the need for preconstruction surveys which shall occur not less than 30 days or no more than 6 months prior to construction activities and ground disturbance. The 2003 and 2004 biological resource assessment surveys conducted by North Fork Associates for the proposed River Oaks Park project and pedestrian bridge are considered reconnaissance level surveys.

#### 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:

- 1) 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;
- 2) 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;
- 3) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands); or
- 4) Violate the Heritage Tree Ordinance (City Code 12.64.040).

#### **ANSWERS TO CHECKLIST QUESTIONS**

## A) IMPACTS TO SPECIAL STATUS SPECIES?

Development of the River Oaks Park project would result in potential disturbance to special status wildlife within the project area. Approximately 83 acres of agricultural field as well as some riparian and ruderal grassland habitat along the Main Drainage Canal will be removed or disturbed as part of the proposed project. Removal and/or disturbance of this habitat could result in impacts to nesting and foraging habitat for Swainson's hawk (a state-listed threatened species and federal species of concern), and habitat for the giant garter snake (state and federal listed threatened species) and northwestern pond turtle (state and federal species of concern). The pedestrian bridge will be supported by two foundations located on top of the Canal levees. This method of construction is anticipated not to impact the Canal or levee banks directly. Therefore, the aquatic habitat within the Canal is not anticipated to be impacted.

Mitigation Measures 7.1 through 7.7, which require NBHCP pre-construction and pre-construction nesting raptor surveys, NBHCP fees, and specific mitigation to reduce potential take, would be implemented in order to comply with the requirements of the NBHCP and to mitigate impacts to Swainson's hawk, giant garter snake, and northwestern pond turtle to less than significant levels.

Potential impacts to the giant garter snake and the northwestern pond turtle species would also be minimized through limiting construction disturbance in and along the Main Drainage Canal and implementing erosion controls (such as Mitigation Measure 3.3 which requires the applicant to prepare and submit a grading plan to the City), hazardous material controls (Mitigation Measures 9.3 through 9.8), and water quality controls (Mitigation Measures 4.2 through 4.5). Since the habitat for these two species is similar, the mitigation in the NBHCP for the giant garter snake includes mitigation for northwestern pond turtle.

Since raptors, including relatively common species, and their nests, are protected pursuant to the California Fish and Game Code (Section 3503.5) and the federal Migratory Bird Treaty Act of 1918, Mitigation Measure 7.4 would be implemented to reduce potential impacts to raptors to less than significant levels. This measure requires pre-construction nesting raptor surveys.

#### B) SPECIES OF LOCAL SIGNIFICANCE?

The Certified Arborist Assessment for the ±83-acre property identified five Heritage Trees (as defined by Sacramento City Code 12.060.020) on the project site of which all five are proposed to be removed as part of the proposed project. In addition, and the 2004 biological assessment identified two Heritage Trees that will be removed for the pedestrian bridge. The trees to be removed include California walnut, white mulberry, London plane, and English walnut. It is the property owner's responsibility for maintaining Heritage Trees on the River Oaks Park property. Activities affecting these trees are prohibited under City Code 12.060.050 unless a permit is first obtained. Mitigation Measures 7.8 through 7.10 would ensure that impacts to Heritage Trees as a result of the proposed project would be less-than-significant.

### C) WETLANDS?

The proposed River Oaks Park project would not result in impacts to waters of the United States. The ±80-acre portion of the property proposed for residential development does not support wetlands or other waters of the United States, as verified by the Army Corps of Engineers (Corps).

In addition, there are no wetlands within the project area or wetlands that would be affected by the pedestrian bridge over the Main Drainage Canal (no wetlands or vernal pools occur within 250 feet of the proposed bridge location).

The Main Drainage Canal is classified as other (non-wetland) waters of the United States. Therefore, it is subject to the jurisdiction of the Army Corps of Engineers under Section 404 of the Clean Water Act and the California Department of Fish and Game under Sections 1600-1607 of the California Fish and Game Code. The proposed pedestrian bridge would be designed and built to stay outside of the ordinary high water mark of the Canal and therefore would not impact waters of the United States. Therefore, a Clean Water Act 404 Corps permit would not be required for the project. Mitigation Measure 7.11 would ensure no impacts to waters of the United States as a result of construction and implementation of the pedestrian bridge.

Although the Corps jurisdiction for waters of the United States is within the ordinary high water mark for the Canal, the Department of Fish and Game's jurisdiction under Sections 1600-1616 of the Fish and Game Code extends to the edge of the riparian vegetation. The riparian vegetation within the area of the proposed pedestrian bridge alignment consists mainly of Himalayan blackberry (along with two dying walnut trees). Clusters of willow, oak, and walnut occur south of the bridge alignment. Since the pedestrian bridge would impact riparian vegetation, the applicant shall obtain a 1602 Streambed Alteration Agreement from the Department of Fish and Game (Mitigation Measure 7.12). Implementation of this Mitigation Measure, along with Mitigation Measure 7.11, would ensure less-than-significant impacts related to waters of the United States and riparian habitat as a result of the proposed project.

#### MITIGATION MEASURES

Mitigation Measure 7.1: The project applicant/developer shall pay the one-time, up-front NBHCP fee based upon a ratio of 0.5 acres of mitigation land for every 1.0 gross acre of development which funds mitigation land acquisition and associated habitat enhancement, management, endowment, administration, monitoring, etc. Currently the fee is \$10,027 per developed acre; however, the land use agencies may adjust this fee as provided for in the NBHCP. Optionally, the applicant/developer may donate land to TNBC in lieu of payment of some or all of the acquisition component of the fee. In such cases, TNBC, USFWS, and CDFG will determine which lands are acceptable. The applicant/developer shall comply with Sacramento City Code 15.88.091 subsections A through D relating to NBHCP fees.

Mitigation Measure 7.2: As stated in Sacramento City Code 15.88.091 (D), the project applicant/developer shall execute an agreement, in a form acceptable to and approved by the City Attorney, that requires the applicant and its successors in interest to do the following:

- 1) Comply with all provisions of the NBHCP;
- 2) Comply with the Incidental Take Permit and the State Incidental Take Authorization issued in conjunction with the NBHCP;
- 3) Pay all applicable fee increases and additions, whether adopted by the City before or within six months after issuance of the grading permit (but an applicant who has been specifically and expressly asked by the City manager or

- designee to pay HCP fees earlier than the date of issuance of a grading permit, and who in fact makes the requested early payment, shall not be subject to the "catch up" provision of this clause); and
- 4) Release, defend, and fully indemnify the City and its officers, employees, and agents from and against all costs and damages, including attorney's fees, that may arise in connection with the City's issuance of a grading permit to the applicant, including but not limited to claims (procedural or substantive) that relate to HCP fee increases adopted by the City and arise under California's Mitigation Fee Act (Title 7, Division 1 of the Government Code at Chapters 6, 7, 8, and 9).
- Mitigation Measure 7.3: Not less than 30 days and not more than 6 months prior to commencement of construction activities on the project site, the applicant shall contract with a qualified biologist to conduct a pre-construction survey of the site to determine the status and presence of, and likely impacts to, all Covered Species and their habitat on the site. These species shall include giant garter snake, northwestern pond turtle, and Swainson's hawk. The results of the pre-construction surveys along with the recommended take minimization measures shall be documented in a report and submitted to the City of Sacramento, TNBC, USFWS and the CDFG. Note: Covered Species are defined as the Federally Protected Species, State Protected Species and the Other Species identified within Table I-1 in the NBHCP (22 species total).
- Mitigation Measure 7.4: The project applicant/developer shall contract with a qualified biologist to conduct pre-construction nesting raptor surveys if construction is planned within the raptor nesting season (February-August). Surveys <a href="mailto:should.shall">should.shall</a> be conducted no more than 30 days prior to the commencement of construction, according to Department of Fish and Game guidelines. If an occupied raptor nesting is identified, the project applicant shall contact Department of Fish and Game to determine appropriate mitigation, which is dependent on species.
- Mitigation Measure 7.5: The project applicant/developer shall implement the following specific measures prior to ground disturbance and during construction to avoid, minimize and mitigate potential impacts to and reduce take of **giant garter snake**. These measures shall be included as notes on all project construction plans. (Note: The following represents measure V.A.5.a in the NBHCP.)
  - 1) Within the Natomas Basin, all construction activity involving disturbance of habitat, such as site preparation and initial grading, is restricted to the period between May 1 and September 30. This is the active period for the giant garter snake and direct mortality is lessened, because snakes are expected to actively move and avoid danger.
  - 2) Pre-construction surveys for giant garter snake, as well as other NBHCP Covered Species, must be completed for all development projects by a qualified biologist approved by USFWS. If any giant garter snake habitat is found within a specific site, the following additional measures shall be implemented to minimize disturbance of habitat and harassment of giant garter snake, unless such project is specifically exempted by USFWS.

- 3) Between April 15 and September 30, all irrigation ditches, Canals, or other aquatic habitat shouldshall be completely dewatered, with no puddle water remaining, for at least 15 consecutive days prior to the excavation or filling in of the dewatered habitat. Make sure dewatered habitat does not continue to support giant garter snake prey, which could detain or attract snakes into the area. If a site cannot be completely dewatered, netting and salvage of prey items may be necessary. This measure removes aquatic habitat and allows giant garter snake to leave on their own.
- 4) For sites that contain giant garter snake habitat, no more than 24-hours prior to start of construction activities (site preparation and/or grading), the project area shall be surveyed for the presence of giant garter snake. If construction activities stop on the project site for a period of two weeks, a new giant garter snake survey shall be completed no more than 24-hours prior to the re-start of construction activities.
- 5) Confine clearing to the minimal area necessary to facilitate construction activities. Flag and designate avoided giant garter snake habitat within or adjacent to the project as Environmentally Sensitive Areas. This area shall be avoided by all construction personnel.
- 6) Construction personnel completing site preparation and grading operations shall receive USFWS approved environmental awareness training. This training instructs workers on how to identify giant garter snakes and their habitats, and what to do if a giant garter snake is encountered during construction activities. During this training an on-site biological monitor shall be designated.
- 7) If a live giant garter snake is found during construction activities, immediately notify the USFWS and the project's biological monitor. The biological monitor, or his/her assignee, shall do the following:
  - (a) Stop construction in the vicinity of the snake. Monitor the snake and allow the snake to leave on its own. The monitor shall remain in the area for the remainder of the work day to make sure the snake is not harmed or if it leaves the site, does not return. Escape routes for giant garter snake <a href="shouldshall">shouldshall</a> be determined in advance of Construction and snakes <a href="shouldshall">shouldshall</a> always be allowed to leave on their own. If a giant garter snake does not leave on its own within I working day, farther consultation with USFWS is required.
- 8) Upon locating dead, injured or sick threatened or endangered wildlife species, the Permittees or their designated agents must notify within 1 working day the Service's Division of Law Enforcement (2800 Cottage Way, Sacramento CA 95825) or the Sacramento Fish and Wildlife Office (2800 Cottage Way, Room W-2605, Sacramento, CA 95825, telephone P16 414-6600). Written notification to both offices must be made within 3 calendar days and must include the date, time, and location of the finding of a specimen and any other pertinent information.
- 9) Fill or construction debris may be used by giant garter snake as an overwintering site. Therefore, upon completion of construction activities remove any temporary fill and/or construction debris from the site. If this material is situated

- near undisturbed giant garter snake habitat and it is to be removed between October 1 and April 30, it shall be inspected by a qualified biologist to assure that giant garter snake are not using it as hibernaculae.
- 10) No plastic, monofilament, jute, or similar erosion control matting that could entangle snakes will be placed on a project site when working within 200 feet of snake aquatic or rice habitat. Possible substitutions include coconut coir matting, tactified hydroseeding compounds, or other material approved by the Wildlife Agencies.
- 11) Fences will be constructed along the shared boundary of urban development and the North Drainage Canal and the East Drainage Canal within Sutter's Permit Area, subject to the following guidelines:
  - (a) A minimum of 100 feet will be provided from fence-to-fence and access to the Canals shall be limited by gates.
  - (b) A snake deterrent will be placed along the fences on the North Drainage Canal and the East Drainage Canal (i.e., fence construction that restricts snake movement or an appropriate vegetative barrier either inside or outside of the boundary fence). The design of the deterrent shall be subject to approval by the Wildlife Agencies.
  - (c) The specific fence/snake barrier design adjacent to a given development will be determined within Sutter County's review of the proposed development and the fence/barrier shall be installed immediately alter site is completed.
- 12) At the lime of urban development along the North and East Drainage Canals, Sutter shall consult with the Wildlife Agencies to determine design strategies that would enhance conditions for giant garter snake movement through the North and East Drainage Canals. Possible strategies may include expanded buffer areas and modified Canal cross sections if such measures are, in the determination of Sutter and the Water Agencies, found to be feasible.
- Mitigation Measure 7.6: The project applicant/developer shall implement the following specific measures to avoid, minimize and mitigate potential impacts to and reduce take of northwestern pond turtle. These measures shall be included as notes on all project construction plans. (Note: The following represents measure V.A.5.j in the NBHCP.)
  - 1) Take of the northwestern pond turtle as a result of habitat destruction during construction activities, including the removal of irrigation ditches and drains, and ruing ditch and drain maintenance, will be minimized by the dewatering requirement described above (Mitigation Measure 7.5) for giant garter snake.
- Mitigation Measure 7.7: The project applicant/developer shall implement the following specific measures to avoid, minimize and mitigate potential impacts to and reduce take of Swainson's hawk. These measures shall be included as notes on all project construction plans. (Note: The following represents measure V.A.5.b in the NBHCP.)

#### Measures to Reduce Cumulative Impacts to Foraging Habitat

1) To maintain and promote Swainson's hawk habitat values, Sutter County will not obtain

coverage under the NBHCP and incidental take permits, nor will Sutter County grant Urban Development Permit approvals, for development on land within the one-mile wide Swainson's Hawk Zone adjacent to the Sacramento River. The City of Sacramento has limited its Permit Area within the Swainson's Hawk Zone to the approximately 252 acres located within the North Natomas Community Plan that was designated for urban development in 1994 and, likewise, will not grant development approvals within the Swainson's Hawk Zone beyond this designated 252 acres. It should be noted that of these 252 acres of land in the Swainson's Hawk Zone, about 80 acres will be a 250 foot wide agricultural buffer along the City's side of Fisherman's Lake. Should either the City or the County seek to expand NBHCP coverage for development within the Swainson's Hawk Zone beyond that described above, granting of such coverage would require an amendment to the NBHCP and permits and would be subject to review and approval by the USFWS and the CDFG in accordance with all applicable statutory and regulatory requirements.

Because the effectiveness of the NBHCP's Operating Conservation Program (OCP) adequately minimizes and mitigates the effects of take of the Swainson's hawk depends substantially on the exclusion of future urban development from the City's and Sutter County's portion of the Swainson's Hawk Zone, approval by the City of future urban development (i.e., uses not consistent with Agricultural Zoning) in the zone beyond the 170 (252 acres minus 80) acres identified above or approval by Sutter of any future urban development in the Swainson's Hawk Zone would constitute a significant departure from the Plan's OCP and would trigger are evaluation of the City's and/or Sutter's Permits and possible suspension or revocation of the City's and/or County's permits.

#### Measures to Reduce Nest Disturbance

- 1) Prior to the commencement of development activities at any development site within the NBHCP area, a pre-construction survey shall be completed by the respective developer to determine whether any Swainson's hawk nest trees will be removed on-site, or active Swainson's hawk nest sites occur on or within ½ mile of the development site. These surveys shall be conducted according to the Swainson's Hawk Technical Advisory Committee's (May 31, 2000) methodology or updated methodologies, as approved by the Service and CDFG, using experienced Swainson's hawk surveyors.
- 2) If breeding Swainson's hawks (i.e. exhibiting nest building or nesting behavior) are identified, no new disturbances (e.g., heavy equipment operation associated with construction) will occur within ½ mile of an active nest between March 15 and September 15, or until a qualified biologist, with concurrence by CDFG, has determined that young have fledged or that the nest is no longer occupied. If the active nest site is located within ¼ mile of existing urban development, the no new disturbance zone can be limited to the ¼ mile versus ½ mile. Routine disturbances such as agricultural activities, commuter traffic, and routine facility maintenance activities within ½ mile of an active nest are not restricted.
- Where disturbance of a Swainson's hawk nest cannot be avoided, such disturbance shall be temporarily avoided (i.e., defer construction activities until after the nesting season) and then, if unavoidable, the nest tree may be destroyed during the non-nesting season. For purposes of this provision the Swainson's hawk nesting season is defined as March 15 to September 15. If a nest tree (any tree that has an active nest in the year the impact

- is to occur) must be removed, tree removal shall only occur between September 15 and February 1.
- 4) If a Swainson's hawk nest tree is to be removed and fledglings are present, the tree may not be removed until September 15 or until the California Department of Fish and Game has determined that the young have fledged and are no longer dependent upon the nest tree.
- 5) If construction or other project related activities which may cause nest abandonment or forced fledgling are proposed within the ¼ mile buffer zone, intensive monitoring (funded by the project sponsor) by a Department of Fish and Game approved raptor biologist will be required. Exact implementation of this measure will be based on specific information at the project site.

#### Measures to Prevent the Loss of Nest Trees

- 1) Valley oaks, tree groves, riparian habitat and other large trees will be preserved wherever possible. The City and Sutter County shall preserve and restore stands of riparian trees used by Swainson's hawks and other animals, particularly near Fisherman's Lake and elsewhere in the Plan Area where large oak groves, tree groves and riparian habitat have been identified in the Plan Area.
- 2) The raptor nesting season shall be avoided when scheduling construction near nests in accordance with applicable guidelines published by the Wildlife Agencies or through consultation with the Wildlife Agencies.

## Measures to Mitigate the Loss of Swainson's Hawk Nest Trees

- 1) The NBHCP will require 15 trees (five gallon container size) to be planted within the habitat reserves for every Swainson's hawk nesting tree anticipated to be impacted by Authorized Development. It will be the responsibility of each Land Use Agency approving development that will impact Swainson's hawk nest trees to provide funding from the applicable developer for purchase, planting, maintenance and monitoring of trees at the time of approval of each Authorized Development project. TNBC shall determine the appropriate cost for planting, maintenance and monitoring of trees.
- 2) The Land Use Agency Permittee approving a project that impacts an existing Swainson's hawk nest tree shall provide funding sufficient for monitoring survival success of tree for a period of 5 years. For every tree lost during this time period, a replacement tree must be planted immediately upon the detection of failure. Trees planted to replace trees lost shall be monitored for an additional 5-year period to ensure survival until the end of the monitoring period. A 100% success rate shall be achieved. All necessary planting requirements and maintenance (i.e., fertilizing, irrigation) to ensure success shall be provided. Trees must be irrigated for a minimum of the first 5 years after planting, and then weaned off the irrigation in an approximate 2-year period. If larger stock is planted, the number of years of irrigation must be increased accordingly. In addition, 10 years after planting, a survey of the trees shall be completed to assure 100% establishment success. Remediation of any dead trees shall include completion of the survival and establishment process described.
- 3) Of the replacement trees planted, a variety of native tree species will be planted to provide trees with differing growth rates, maturation, and life span. This will ensure

that nesting habitat will be available quickly (5-10 years in the case of cottonwoods and willows), and in the long term (i.e., valley oaks, black walnut and sycamores), and minimize the temporal losses from impacts to trees within areas scheduled for development within the 50-year permit life. Trees shall be sited on reserves in proximity to hawk foraging areas. Trees planted shall be planted in clumps of 3 trees each. Planting stock shall be a minimum of 5-gallon container stock for oak and walnut species.

- 4) In order to reduce temporary impacts resulting from the loss of mature nest trees, mitigation planting shall occur within 14 months of approval of the NBHCP and ITP's. It is estimated at this time that 4 nesting trees within the City of Sacramento are most likely to be impacted by Authorized Development in the near term. Therefore, in order to reduce temporal impacts, the City of Sacramento will advance funding for 60 sapling trees of diverse, suitable species (different growing rates) to TNBC within the above referenced 14 months. It is anticipated that the City will recover costs of replacement nest trees as an additional cost to be paid by private developers at the time of approval of their development projects that impact mature nest trees.
- 5) For each additional nesting tree removed by Land Use Agencies' Covered Activities, the Land Use Agency shall fund and provide for the planting of 15 native sapling trees of suitable species with differing growth rates at suitable locations on TNBC preserves. Funding for such plantings shall be provided by the applicable Permittee within 30 days of approving a Covered Activity that will impact a Swainson's hawk nesting tree.
- Mitigation Measure 7.8: The applicant/property owner shall be responsible for adhering to the protection and maintenance responsibility measures for Heritage Trees as outlined in Sacramento City Code 12.64.050 and 12.64.050.
- Mitigation Measure 7.9: Prior to any construction or grading on the project site, the applicant/property owner shall consult with the Sacramento City Arborist and acquire a permit from the Director in order to conduct any activities affecting Heritage Trees (as defined by Sacramento City Code 12.64.020). Activities affecting Heritage Trees include removal, pruning of any segment greater than twelve (12) inches in circumference or the placement of any chemical or other deleterious substance by spray, and disturbing the soil or placing any chemical or other deleterious substance or material on the soil within the drip line area (City Code 12.64.050).
- Mitigation Measure 7.10: The tree protection methods listed below shall be implemented by the applicant/developer, including during grading and construction for the pedestrian bridge, and shall be identified on all site construction plans for the project.
  - 1) Prior to the issuance of demolition/grading permits a 6 foot chain link fence shall be installed around the dripline of trees within the construction area. The dripline is an imaginary line on the ground directly below the outermost tips of the branches. Orange plastic fencing is acceptable but not recommended because it does not stand up to construction activity and is easily removed. The fencing shall remain in place for the duration of the project except for the temporary removal required to replace existing curb, gutter, and sidewalk.

- 2) No excavation for utilities, trenching, grade changes, storage of materials or parking of vehicles shall be allowed within the fenced area. Boring or hand trenching for utilities shall be allowed within the fenced area under the supervision of the project arborist.
- 3) The contractor shall hire an International Society of Arboriculture (ISA) certified arborist to do any required pruning for building or equipment clearances. The arborist will also perform any root inspections.
- 4) If during excavation for the project or for any necessary sidewalk, curb, gutter repair or driveway construction, tree roots greater than two inches in diameter are encountered work shall stop immediately until project arborist can perform an on-site inspection. All roots shall be cut clean and the tree affected may require supplemental irrigation/fertilization and pruning as a result of root pruning.
- 5) The contractor shall be held liable for any damage to existing trees. i.e. trunk wounds, broken limb, pouring of any deleterious materials, or washing out concrete under the drip line of the tree. Damages will be assessed using the "Guide to Plant Appraisal" ninth edition published by the ISA. The project arborist will submit a report to the property owner for review.
- Mitigation Measure 7.11: The applicant/property owner shall design, construct, and implement the pedestrian bridge over the Main Drainage Canal so that all parts of the bridge (including footings and foundations) as well as construction activity during grading and installation shall stay outside of the ordinary high water mark of the Canal. The ordinary high water mark shall be delineated on all construction level drawings and plans. In addition, all construction level drawings and plans for the pedestrian bridge shall be approved by the City Planning Department prior to construction of the bridge. Note: Non-conformance with this measure would require the applicant/developer to acquire Section 401 Nationwide Permit(s) from the Army Corps of Engineers and a Section 404 Water Quality Certification from the Regional Water Quality Control Board.
- Mitigation Measure 7.12: The applicant/property owner shall obtain a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Game prior to construction of bridge footings, foundations, and trails on the Natomas Main Drainage Canal levees. Note: A Streambed Alteration Agreement would not allow construction to alter the Canal bed (refer to Mitigation Measures 4.5 and 14.3).

#### **FINDINGS**

Implementation of Mitigation Measures 7.1 through 7.12 would reduce potential impacts to biological resources to less than significant levels.

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

#### **ENVIRONMENTAL SETTING**

Pacific Gas and Electric (P.G. & E.) provides natural gas to the project area. The natural gas lines are located underground along West El Camino Avenue. The project site itself does not have natural gas pipelines onsite.

Sacramento Municipal Utility District (SMUD) provides electrical service to the project area and neighborhood distribution lines (12kV) are located on poles located along West El Camino Avenue, along the project's west boundary, and across the center of the project site. Two polemounted transformers are located at the northwest side of the project site. The distribution lines along the west project boundary supply power to the residence and produce stand. *Figure 1.3 Aerial Photo* indicates the approximate location of power lines on the site. No high-voltage tower mounted transmission lines (115 to 460 kV), over head subtransmission lines (60 to 69 kV), capacitor, or concrete pad mounted electrical transformers are located at the project site or observed in the vicinity (WKA, 2003).

## **Energy**

In 2000, California experienced power shortages after an attempt to deregulate energy markets. The ensuing energy crisis led to increased efforts to conserve energy in building designs, appliances, and construction materials. California's Energy Efficiency Standards for Residential and Nonresidential Buildings Title 24, Part 6 regulates energy consumption in new buildings in California. Title 24 also contains regulations pertaining to energy consumption of appliances in buildings including heating, cooling, ventilation, water heating, and lighting systems in all new buildings in California. The City of Sacramento has adopted an Energy Conservation Review Checklist and Development Guidelines for project and site plan review. The intent of the guidelines is to encourage consideration of energy conservation measures early in the development process to minimize project related energy consumption.

In 2004, the California Independent System Operator (ISO) in charge of projecting California's energy supply indicated that the ISO Operations faces additional exposures to resource shortages if there are further generation retirements; additional unknown demand due to

increased California Gross State Product; increase of California goods and services export levels; decreased energy conservation levels; and increases in employment and housing across the state (ISO, 2004).

The ISO 2004 base forecast of resource capacity anticipates there will be 434 MW less capacity available than was available during the 2003 summer peak due to retirements, a downturn in new generation development, and inadequate transfer capabilities on the transmission system (ISO, 2004).

The SNCP EIR states that individual developers shouldshall work with SMUD during the design stage to ensure Conservation Load Management measures for lighting, heating, ventilation, air conditioning, and water heating is incorporated into the project.

SMUD has a New Construction Service staff providing consultation with developers on how to incorporate SMUD energy efficiency programs into new projects. The objective of the program is to maximize the energy efficiency potential of new construction projects consistent with SMUD's energy conservation goals through cost-effective investments and technical assistance for designers and builders. SMUD coordinates with developers to implement programs to encourage integrating energy efficient materials and appliances into new projects.

### STANDARDS OF SIGNIFICANCE

*Gas Service.* A significant environmental impact would result if a project would require P.G. & E. to secure a new gas source beyond their current supplies.

*Electrical Services.* A significant environmental impact would occur if a project resulted in the need for a new electrical source (e.g., hydroelectric and geothermal plants).

#### Answers to Checklist Questions

#### A) IMPACTS TO POWER OR NATURAL GAS?

The proposed project would result in an increase in demand for electricity and natural gas by constructing 654 homes, a recreation center, lighted roads, and parks. The SNCP anticipated the expansion of utility infrastructure to meet the expected demands of new development at the project site. The project will contribute to a region wide increase demand for power and natural gas resources associated with population and employment growth.

The proposed project will be required to comply with State Title 24 Energy Efficiency Standards in construction, utilize the City Energy Conservation Checklist and Guidelines as directed by Mitigation Measure 8.1 and implement SMUD conservation measures as directed by Mitigation Measure 8.2. The parks facilities will incorporate energy efficient materials in construction and lighting installations. Conservation measures integrated into the project will maximize project related electric power and natural gas efficiency to the extent practicable. The project's impact on energy resources will be less-than-significant with mitigation.

## B) USE NON-RENEWABLE RESOURCES IN A WASTEFUL MANNER?

Integrating energy conservation measures as required by in Title 24 will ensure use of energy efficient technology in the project and will reduce the waste of non-renewable resources to less-than-significant levels. Implementation of Mitigation Measure 8.2 requires the project applicant to collaborate with SMUD to integrate SMUD energy efficiency programs into the project design and construction. Integrating energy efficiency into the project at the construction level reduces non-renewable energy demand as much as practicable and would reduce this potential impact to less-than-significant levels. The project will have a less-than-significant impact on non-renewable resources with mitigation.

## C) SUBSTANTIAL INCREASE IN DEMAND OR REQUIRE THE DEVELOPMENT OF NEW SOURCES OF ENERGY?

The project shall comply with title Title 24 construction and site conservation practices, and will incorporate SMUD energy conservation measures into project design as required by Mitigation Measure 8.2. Mitigations will minimize project related energy demand. Energy sources to accommodate planned growth were identified during the preparation of the SNCP and the SNCP EIR. The project will not require the development of new energy resources and will maximize use of the existing supply by implementing conservation in Mitigation Measures 8.1 and 8.2. Therefore, the project will have a less-than-significant impact on the development of new energy sources with mitigation.

## **Mitigation Measures**

Mitigation Measure 8.1: The applicant shall follow City of Sacramento Energy Conservation Review Checklist and Development Guidelines for project and site plan review.

Mitigation Measure 8.2: The developer shall consult with the Sacramento Municipal Utility District's (SMUD), New Construction Service Staff and incorporate SMUD energy conservation recommendations into the project.

#### **FINDINGS**

The project will incorporate energy efficient standards and mitigation ensuring it will effectively minimize the project's demand for energy resources.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than- significant Impact
9. HAZARDS	Impact	witigated	Impact
Would the proposal involve:			
A) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?		X	

		Potentially Significant	
	Potentially	Impact	Less-than-
	Significant	Unless	significant
Issues:	Impact	Mitigated	Impact
B) Possible interference with an emergency evacuation plan?		X	
C) The creation of any health hazard or potential health hazard?		Х	
D) Exposure of people to existing sources of potential health hazards?		X	
E) Increased fire hazard in areas with flammable brush, grass, or trees?		X	

#### **ENVIRONMENTAL SETTING**

The City of Sacramento Fire Department is the first responder for fire, accident, and hazardous materials emergencies in the project area. The Department maintains two HazMat Teams at fire stations in the project region; Truck 5 is stationed downtown at 8th and Broadway, and Truck 20 at Arden Way and Del Paso Boulevard. The HazMat Teams respond to hazardous materials incidents. All members of the HazMat Teams are trained in accordance with National Fire Protection Association standards and are certified by the California Specialized Training Institute as Hazardous Materials Specialists. The teams would be expected to respond to any hazardous materials release in at project site or vicinity.

The project site has a history of agricultural production and sales and residential use from at least as far back as the 1920's. Agricultural activities include the use of machinery and chemical applications to control pests. Gasoline, and diesel fuel, oil and lubricant storage, handling and use are common on farms. Storage, handling, and use of herbicides and pesticides are also a common practice in agricultural production areas. The history of hazardous materials use at the project site was investigated and reported in the Phase 1 report titled *Environmental Site Assessment: River Oaks Park, Sacramento, California,* dated August 7, 2003, by Wallace-Kuhl & Associates attached to this Initial Study as Appendix 1.

The hazardous materials history of the project site was further investigated during preparation of the *Initial Study/Mitigated Negative Declaration (IS/MND) for the West El Camino Avenue Widening and Bridge Replacement* project by the City of Sacramento Department of Public Works. Taber Consultants prepared two environmental assessments for the road and bridge project, a Phase 1, dated December 18, 2001, and Phase 2, dated April 11, 2003. The road and bridge project is located at the south boundary of the River Oaks project site and includes the site in the environmental assessments (City of Sacramento, 2002b).

#### **Regulatory Setting**

The City of Sacramento General Plan Hazardous Materials Policies 5 and 6 implement the *Sacramento County Hazardous Waste Management Plan* calling for the City to coordinate with State, County, and federal plans, programs, regulations, and safeguards. The State of California through the Department of Industrial Relations Division of Occupational Safety & Health

regulates the use of workplace hazardous materials through its rules. The rules are enforced by the OSHA program. In California, every employer has a legal obligation to provide and maintain a safe and healthful workplace for employees, pursuant to the California Occupational Safety and Health Act. The project will be required to comply with OSHA standards for handling of potentially dangerous materials at the project site during demolition, construction, and operation of the project.

The Hazardous Materials Division of the Sacramento County Environmental Management Department has been designated by the California Environmental Protection Agency (Cal-EPA) as the Certified Unified Program Agency (CUPA) for Sacramento County. As the CUPA, the Hazardous Materials Division (HMD) is responsible for the implementation of six statewide environmental programs for Sacramento County. These include:

- Underground storage of hazardous substances (USTs);
- Hazardous Materials Business Plan (HMP) requirements;
- Hazardous Waste Generator requirements;
- California Accidental Release Prevention (Cal-ARP) program;
- Uniform Fire Code hazardous materials management plan; and

Above Ground Storage Tanks (Spill Prevention Control and Countermeasures Plan only).

#### 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 asbestoscontaining materials; or

Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

#### ANSWERS TO CHECKLIST QUESTIONS

## A) A RISK OF ACCIDENTAL EXPLOSION OR RELEASE OF HAZARDOUS SUBSTANCES?

During demolition of the existing structures, hazardous materials onsite or used in construction may be disturbed. During construction activity the onsite use and storage of fuels, oils, and other chemicals that could pose a danger if mishandled or released may be necessary. Subsequent to construction, the project site will have parks, trails, and open space landscape areas which require maintenance. Potential storage and use of fuel, oil, and chemicals including chemical cleaners, pesticides, and herbicides may be expected as a part of project site maintenance.

The project will be required to incorporate Mitigation Measures 9.1 through 9.5 to minimize to the potential hazards associated with accidental explosion or release of hazardous substances (including but not limited to: gasoline; oil, pesticides, herbicides, chemicals, or radiation) with implementation of the project and reduce the potential for an accident or release of hazardous materials to less-than-significant levels. The project will have a less-than-significant effect on the risk of accidental release of hazardous materials and explosion with mitigation incorporated.

## B) POSSIBLE INTERFERENCE WITH AN EMERGENCY EVACUATION PLAN?

The project road system is required to meet City of Sacramento Fire Department standards for the provision of adequate evacuation routes and site access for emergency vehicles. The project applicant has proposed an emergency access route in and out of the project site from West El Camino Avenue just west of the Canal. The emergency access driveway will facilitate first responder access to the site and facilitate evacuation of the site if necessary.

During construction of the project, construction related activity along West El Camino Avenue and Orchard Lane could interfere with emergency response or emergency evacuation plans. The developer is required by Mitigation Measure 9.6 to prepare a traffic management plan, a construction schedule, and comply with the City's noticing procedures regarding timing and impacts of construction-related activities on the affected roadways. In general, the developer will use lane reductions instead of closures or detours. Construction is required to be scheduled to limit traffic interruptions. Public safety and emergency services will be kept informed of construction activity schedules for use in planning emergency response routing. Preparation and adherence to the traffic management plan, the construction schedule, and compliance with City noticing procedures will ensure the project related activities have a less-than-significant effect on emergency evacuation plans and emergency response routing.

The project will be required by Mitigation Measure 9.6 to submit a Traffic Management Plan and Construction timing to the City of Sacramento Fire Department for review and approval. Approval of the traffic management plan will ensure the project will not interfere with an emergency evacuation plan and City safety regulations. The project will have a less-than-significant effect on emergency evacuation plans with mitigation.

### C) THE CREATION OF ANY HEALTH HAZARD OR POTENTIAL HEALTH HAZARD?

Use and storage of hazardous cleaners, petrochemicals, and solvents during construction or residential and park facilities can be expected. Use of household chemicals and cleaning agents, herbicides, and pesticides in homes and on landscaping is also expected. Park maintenance facilities may be used to store chemicals, herbicides, and pesticides for use on park grounds. Construction crews and park maintenance staff will be required to comply with OSHA standards for materials handling and application and Mitigation Measures 9.1 through 9.5 reducing potential health hazards associated with construction and operation of the project to less-than-significant levels.

The construction of the water quality basin proposed by the applicant will create a ±1.42-acre storm water retention detention pond that will fill with water during storm and rain events. A body of open water may present a drowning hazard. Mitigation Measure 9.8 requires the applicant to enclose the water quality basin in fencing materials meeting City safety standards

and may be decorative as well as functional. The project water quality basin will create a less-than-significant hazard with mitigation.

## D) EXPOSURE OF PEOPLE TO EXISTING SOURCES OF POTENTIAL HEALTH HAZARDS?

Until recently, the project site was used for agricultural production. Herbicides and pesticide use at the site was recorded by Sacramento County Agricultural Commissioner's Office as required by the State of California Department of Pesticide Regulation. Records of past pesticide use at the site is documented in the *Environmental Site Assessment, River Oaks Park* by Wallace & Kuhl and Associates, Inc. (WKA), August 3, 2003.

The WKA Phase 1 Environmental Assessment includes an investigation of the history of use potentially hazardous materials at the project site. This investigation includes a search of historical records, field surveys of the project site; a vicinity survey; a review of Sacramento County Assessor's office records; and a review of documents, photos, maps, and telephone interviews with persons associated with regulatory agencies and persons familiar with the site (WKA, 2003).

The Phase 1 investigation discovered evidence of past use of one underground storage tank (UST) and one above ground storage tank (AST) at the project site and dismissed the potential for spills of pesticides and herbicides associated with past agricultural activity at the site. The Phase 1 recommends further investigation of the site for potential contamination (WKA, 2003).

## Offsite Investigation

To assess the potential significance of a report of a nearby MTBE spill at a former Exxon station near the project site this Initial Study referenced the Phase 1 and Phase 2 environmental site assessments prepared for the West El Camino Widening and Bridge Replacement Initial Study and Mitigated Negative Declaration. As discussed below the Phase 2 determined the potential of the MTBE spill to affect the River Oaks project site is considered less-than-significant.

The West El Camino Widening and Bridge Replacement IS/MND Phase 1 also identified the UST and AST formerly located at the project site and cited the potential for pesticide and herbicide spills, and recommended further investigation of soils at the site in order to identify any potential contamination (Taber, 2001). As described below, the site investigations indicated the potential for contamination at the site to be less-than-significant.

The West El Camino Widening and Bridge Replacement IS/MND mitigation measures required further investigation of a spill at the former Exxon station and potential contamination at the project site. To comply with the West El Camino Widening and Bridge Replacement IS/MND Mitigation Monitoring and Reporting Program, a Phase 2 investigation and report completed the following tasks:

- Investigated an MTBE release at 2650 Gateway Oaks Drive (former Exxon gas station) located across the Canal to the southeast of the project site at the corner of West El Camino Avenue and Gateway Oaks Drive;
- 2) Conducted further research into the location of the former AST located next to the residence on the River Oaks project site next to the residence at 2700 Orchard Drive, on parcel 255-0220-068; and

3) Reports the results of a series of exploratory borings, soil and groundwater samplings, and analytical testing of samples conducted at the River Oaks site next to the residence at 2700 Orchard Drive, on parcel number 225-0220-068 (Taber, 2003).

The Phase 1 environmental site assessment prepared for the River Oaks project found no direct evidence of hazardous materials contamination on or adjacent to the subject property. No evidence of bulk storage of hazardous materials is indicated to have occurred on site. No potential or confirmed state or federal Superfund sites were identified within one mile of the project site. The Phase 1 prepared for the West El Camino Widening and Bridge Replacement IS/MND indicates that except at mixing or storage areas, where greater residual concentrations could accumulate, pesticides in California agricultural land are rarely at concentrations meeting the criteria for hazardous waste (Taber, 2001). The Phase 1 assessment concludes that the potential for agricultural chemical residuals to exist in surface soils at the project site is less-than-significant (WKA, 2003).

The Phase 2 prepared the West El Camino Widening and Bridge Replacement IS/MND concluded that the likelihood of MTBE from the release at 2650 Gateway Oaks Drive affecting the project site is considered less than significant based on its distance (880+feet) from the project site. The samples taken at 2700 Orchard Lane confirmed that no soils contamination from past UST and AST use at the site was detected during tests at the site. However, the laboratory test on the site samples indicated sample OL-1-2 had organic compounds in the TPH diesel range. The laboratory indicated in a letter attached to the Phase 2 that the compounds were in a pattern non-typical for diesel and are mostly due to extractable vegetation byproducts associated with on site crop production (James, 2003).

The Phase 2 concluded that it could not rule out the possibility of soil contamination due to a petroleum release at the former UST location. However, the Phase 2 also concludes that the risk of excavation encountering soil contamination due to a petroleum release is considered very low and that further study was not considered warranted at the time the assessment was made (Taber, 2003). Three environmental site assessments of the project site have determined the potential hazards from past use at the project site to be acceptable, and are therefore less-than-significant

The former onsite building foundations may have asbestos containing materials in their construction. The developer shall be required to test building materials for the presence of asbestos by Mitigation Measure 9.5 and 9.7 and remove the asbestos containing material per the Hazardous Materials handling procedures in Chapter 6.5, Division 20, California Health and Safety Code and Title 22 of the California Administrative Code.

The potential for hazardous materials to be uncovered during demolition and removal of foundations, storage containers, equipment, and debris from the site exists. Mitigation Measure 9.7 requires the project site to be reinspected for signs of hazardous materials during demolition and removal of debris from the site. Implementation of Mitigation Measures 9.1 through 9.5 and 9.7 will reduce the potential creation of, or expose people to project related hazards. The potential for exposure of persons to existing hazards will be less-than-significant with mitigation.

## E) INCREASED FIRE HAZARD IN AREAS WITH FLAMMABLE BRUSH, GRASS, OR TREES?

The project site will be completely graded and cleared of cut brush, grass, and trees prior to development. The project site is separated from the vegetated area along the Canal by the levee. The project is not located in an area with significant organic fuel sources and is therefore at minimal risk from wildfire. The City of Sacramento Fire Department requires the project meet the provisions of the fire code during implementation ensuring reduction of flammable materials at the project site, thereby reducing the potential fire related hazards to less-than-significant levels.

During construction, vegetated areas adjacent to the construction site and cleared vegetation not removed from the site immediately may be flammable. Mitigation Measures 9.9 and 9.10 shall be implemented to reduce the potential hazards of fire from debris and vegetation at the project site to a less-than-significant level.

## **Mitigation Measures**

- Mitigation Measure 9.1: Excavations or any sampling activities that come within 10 feet of groundwater shall require a permit from the Sacramento County Environmental Management Department, Hazardous Materials Division (HMD). Any ground cuts associated with project development shall avoid contamination of groundwater.
- Mitigation Measure 9.2: Hazardous materials used during implementation of the project which exceed the established reportable quantity must be reported to the HMD. A Hazardous Materials Plan (HMP) must be filed with HMD. The reportable quantity of hazardous materials is as follows:
  - 55 gallons or more of a hazardous material in liquid state;
  - 200 cubic feet or more of a compressed gas;500 pounds or more of a hazardous material in a solid state.

In addition, any hazardous waste generated by the construction and operation of this project would require a hazardous waste generator permit from HMD. A permit can be obtained by completing a HMP with HMD.

- Mitigation Measure 9.3: All potentially hazardous materials and fuel supplies shall be stored on pallets in fenced and secured construction areas to protect them from exposure to weather, incidents of theft, and prevent accidental exposure to people. Incompatible materials shall be stored in separate areas as appropriate.
- Mitigation Measure 9.4: Equipment refueling and maintenance shall take place only within designated staging areas prepared to minimize and contain potential spills of fuels, oils, and hazardous substances.
- Mitigation Measure 9.5: Hazardous or contaminated materials may only be removed and disposed from the project site in accordance with the following regulations and requirements:
  - A. Chapter 6.5, Division 20, California Health and Safety Code.

- California Administration Code, Title 22 relation to Handling, storage, and transfers of hazardous Materials.
- City of Sacramento Building Code and the Uniform Building Code, 1994 edition.
- B. Coordination shall be made with the County of Sacramento Environmental Management Department, Hazardous Materials Division, and the necessary applications shall be filed.
- C. All hazardous materials shall be disposed of at an approved disposal site and shall only be hauled by a current California registered hazardous waste hauler using correct manifesting procedures and vehicles displaying a current Certificate of Compliance. The developer shall identify by name and address the site where toxic substances shall be disposed of. No payment for removal and disposal services shall be made without a valid certificate from the approved disposal site that the material was delivered.
- D. None of the aforementioned provisions shall be construed to relieve the developer from the developer's responsibility for the health and safety of all persons (including employees) and from the protection of property during the performance of the work. This requirement shall be applied continuously and not be limited to normal working hours.
- Mitigation Measure 9.6: The applicant shall prepare a traffic management plan, a construction schedule, and comply with the City's noticing procedures regarding timing and impacts of construction related activities on the affected roadways. The developer will use lane reductions instead of closures or detours. Construction will be scheduled to limit traffic interruptions. The police and fire departments shall be kept informed of construction activities for use in planning emergency response routing. The traffic management plan and construction schedule shall be approved by the City Fire Department.
- Mitigation Measure 9.7: A hazardous materials inspector shall be present during demolition and removal of the existing buildings, storage, foundations, and debris field. If hazardous materials are encountered during demolition and removal, work shall be required to stop until an assessment of the hazard has been made and a plan of action determined.
  - Removal of hazardous materials shall be conducted in compliance with Chapter 6.5, Division 20, California Health and Safety Code; California Administration Code, Title 22 relation to Handling, storage, and transfers of hazardous Materials; City of Sacramento Building Code and the Uniform Building Code, 1994 edition.
- Mitigation Measure 9.8: The water quality basin shall be enclosed with fencing to prevent people from entering the basin during the storm season. The fencing may be decorative in nature and shall comply with City standards.
- *Mitigation Measure 9.9:* Removal of vegetation shall be implemented in a timely manner to reduce the potential for fire hazard.
- *Mitigation Measure 9.10:* The developer shall take necessary precautions to ensure that defensible space between vegetated areas and the construction site are maintained as required by the State Fire Code. The developer shall also ensure a clear space of at least

ten feet shall be maintained between piles of cleared vegetation while in the interim of removing the vegetation.

#### **FINDINGS**

The project will be required to comply with federal, State, and City safety regulations and standards for emergency access and hazardous materials handling. Additionally, three environmental site assessments of the project site determined existing hazards to public safety from past use at the site to be less-than-significant.

	Potentially Significant	Potentially Significant Impact Unless	Less-than- significant
Issues: 10. NOISE	Impact	Mitigated	Impact
Would the proposal result in:			
A) Increases in existing noise levels?		X	
Short-term		Α	
Long Term			
B) Exposure of people to severe noise levels?			
Short-term		X	
Long Term			

#### **ENVIRONMENTAL SETTING**

The technical study, *Environmental Noise Assessment River Oaks Park City of Sacramento California, October 28, 2004*, was prepared for the project and is attached to the Initial Study as Appendix 9.

#### **Acoustical Terminology**

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and hence are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by the A-weighing network. There is a strong correlation between A-weighted sound levels (expressed as dBA)

and the way the human ear perceives noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time-varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise.

The Day-night Average Level (Ldn) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment. The *Environmental Noise Assessment* in Attachment 9 contains a glossary of acoustical terminology in Appendix A to the Assessment.

## **Existing Noise Environment in the Project Vicinity**

The existing ambient noise environment in the immediate project vicinity is defined almost exclusively by noise from traffic on Interstate 80 and West El Camino Avenue. Intermittent aircraft operations associated with Sacramento International Airport are audible at the project site, but do not appreciably affect ambient conditions relative to Interstate 80 and West El Camino Avenue. As a result, roadway noise was the focus of the noise analysis.

To generally quantify ambient noise levels in the project vicinity, continuous and short-term noise level measurements were conducted at the locations across the project site and indicated in Table 10.1 below (Table 1 on page 2 of the Environmental Noise Assessment). Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI SI.4).

The noise level meters were programmed to record the maximum and average noise level at each site during the survey. The average value, denoter Leq, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The ambient noise level amounts are listed in Table 10.1 below.

Table 10.1

Ambient Noise Monitoring Results

River Oaks Park Project Site - September 23-24, 2004

Site	Location	Average (Leq, dB)
1	25 feet from I-80 right of way - short term	75
2	175 feet from I-80 right of way - short term	68

3	225 feet from I-80 right of way - short term	61
4	375 feet from I-80 right of way - short term	58
5	900 feet from I-80 right of way - 24 hour site	59

Source: Bollard & Brennan, Inc.

Noise measurement locations are shown on Figure 1. in the Environmental Noise Analysis in Appendix 9

The ambient noise survey results indicate that the measured daytime ambient noise levels at the project site are fairly high in close proximity to Interstate 80 as would be expected, and that the project site is affected primarily by nearby traffic noise sources. A specific assessment of existing and future, project and no-project traffic noise levels is provided below.

## **Existing Traffic Noise Environment**

To predict noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The model is based upon the Calveno vehicle noise reference for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly Leq values for free-flowing traffic conditions.

Traffic volumes for existing conditions were obtained from Sacramento Area Council of Governments (SACOG) and Dowling Associates, Inc (traffic consultants). Truck usage on the local area roadways was estimated from field observations and published Caltrans truck traffic counts. Table 2 shows the predicted existing traffic noise levels in terms of the Day/Night Average Level descriptor (Ldn) at a standard distance of 100 feet from the centerlines of the existing immediate project-area roadways for existing conditions, as well as distances to existing traffic noise contours. The extent by which existing land uses in the project vicinity are affected by existing traffic noise depends on their respective proximity to the roadways and their individual sensitivity to noise.

Table 10.2

Existing Traffic Data, Noise Levels and Distances to Contours

River Oaks Park Project - Sacramento County, California

				Distance to Contours (feet)		
Roadway	Segment	Existing ADT	Ldn @ 100 ft.	70 dB Ldn	65 dB Ldn	60 dB Ldn
I-80	I-5 to West El Camino	77,000	79 dB	392	845	1,821
W. El Camino	Orchard Lane to Gateway Oaks	25,000	66 dB	50	105	233

Notes: Source: FHWA-RD-77-108 with inputs from DKS (p.m. peak hour \*10) and Bollard & Brennan. Distances to traffic noise contours are measured in feet from the centerlines of the roadways

## **Regulatory Setting**

Identified potentially significant noise sources associated with this project are project-related construction, increased traffic noise on the local roadway network associated with the more intensive use of the River Oaks site, and the effects of Interstate 80 and West El Camino Avenue

traffic noise on the proposed residences within the project. The following section identified the noise standards which would be applicable to these noise sources.

## **Proposed Residential Uses:**

The Noise Element of the *City of Sacramento General Plan* establishes 60 dB Ldn as a normally acceptable exterior noise environment for outdoor activity areas of residential uses affected by traffic noise sources, with conditionally acceptable levels up to 70 dB Ldn. Where residential development is proposed within areas exceeding normally acceptable levels, acoustical analyses must be provided to ensure that appropriate noise mitigation measures are included in the project design.

#### **Construction Noise:**

The *City of Sacramento Noise Ordinance* exempts construction noise from the local noise standards provided it occurs during the hours of Monday through Saturday from 7 am to 6 pm, and on Sunday from 9 am to 6 pm.

## **Project-Related Traffic Noise Level Increases:**

The General Plan establishes 4 dB as the threshold of significance for project-related traffic noise level increases.

#### 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;
- Residential interior noise levels of 45 L<sub>dn</sub> or greater caused by noise level increases due to the project;
- Construction noise levels not in compliance with the City of Sacramento Noise Ordinance;
- Occupied existing and project residential and commercial areas are exposed to vibration peak particle velocities greater than 0.5 inches per second due to project construction;
- Project residential and commercial areas are exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; and
- Historic buildings and archaeological sites are exposed to vibration peak particle velocities greater than 0.25 inches per second due to project construction, highway traffic, and rail operations.

#### **ANSWERS TO CHECKLIST QUESTIONS**

## A-B) INCREASES IN EXISTING SHORT OR LONG TERM NOISE LEVELS AND EXPOSURE OF PEOPLE TO SEVERE SHORT OR LONG-TERM NOISE LEVELS?

#### **Traffic Noise Sources**

To assess noise impacts due to project-related traffic increases on the local roadway network, traffic noise levels are predicted at a representative distance for both existing and future, project and no-project conditions. Noise impacts are identified at existing noise-sensitive areas if the noise level increases which result from the project exceed the 4 dB significance threshold or if future traffic noise levels are predicted to exceed 60 dB Ldn at the proposed residential uses within the project site.

To describe existing and projected noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The model is based upon the Calveno vehicle noise reference factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly Leq values for free-flowing traffic conditions. To predict traffic noise levels in terms of Ldn, it is necessary to adjust the input volume to account for the day/night distribution of traffic.

Traffic volumes for existing and future conditions and scenarios are contained in the Transportation Section of this document. Table 10.3 shows the predicted increases in traffic noise levels on West El Camino Avenue and Interstate 80 for existing and future conditions which would result from the project. These Tables are provided in terms of Ldn at a standard distance of 100 feet from the centerlines of these roadways.

Table 10.3

Existing and Predicted Future Traffic Noise Levels
River Oaks Park Project - Sacramento, California

	Ldn	@ 100	feet.				Distance to Future Contours		
Roadway	Exist	E+P	Change	Future	Future +P	Change	60 dB	65 dB	70
I-80	78.9	79.1	0.2	81.0	81.1	0.1	2,569	1,192	553
W. El Camino	65.5	66.0	0.5	65.6	66.1	0.5	256	119	55

Source: Bollard & Brennan, Inc., FHWA RD-77-108 Traffic Noise Prediction Model

## **Construction Noise:**

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels, as indicated in Table 10.4, ranging from 85 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with

transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration, and would likely occur primarily during daytime hours.

Table 10.4
Construction Equipment Noise

Type of Equipment	Maximum Level, dB at 50 feet
Bulldozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85

Source: Environmental Noise Pollution, Patrick R. Cunniff, 1977.

## **Specific Impacts and Mitigation Measures**

Impact 1: Project-Related Increase in Existing Traffic Noise Levels. The project will generate increased traffic on the existing roadway network. The project-generated traffic is expected to result in traffic noise level increases over existing baseline levels ranging from 0.2 to 0.5 dB, as indicated by Table 10.3.

Pursuant to the City of Sacramento General Plan, a substantial increase in traffic noise levels is defined as 4 dB. Due to the relatively small number of trips which are predicted to be generated by the proposed project, traffic noise level increases are predicted to be insignificant on all segments of the local roadway network evaluated in Table 10.3. Because the project-generated traffic would not cause significant traffic noise level increases along the existing roadway network, this impact is considered to be less-than-significant based on significance criteria "c" and no mitigation is required.

**Impact 2: Future (Cumulative) increase in traffic noise levels:** The project will contribute to future/cumulative traffic on the roadway network. The project-generated traffic is expected to result in traffic noise level increases over cumulative no-project levels ranging from 0.1 to 0.5 dB, as indicated by Table 3.

Pursuant to the City of Sacramento General Plan, a substantial increase in traffic noise levels is defined as 4 dB. Due to the relatively small number of trips which are predicted to be generated by the proposed project, traffic noise level increases are predicted to be insignificant on all segments of the local roadway network evaluated in Table 3. Because the project-generated traffic would not cause significant traffic noise level increases along the existing roadway network, this impact is considered to be less-than-significant based on significance criteria "c" and no mitigation is required.

**Impact 3: Construction Noise:** Activities associated with construction at the project site will result in elevated noise levels in the immediate area.

Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet, as indicated in Table 10.4. Construction activities

# RIVER OAKS PARK INITIAL STUDY

would be temporary in nature and would likely occur during normal daytime working hours. If construction activities occur outside the hours of Monday through Saturday from 7 am to 6 pm, and on Sunday from 9 am to 6 pm, this impact would be considered potentially significant according to significance criteria "e". Implementation of the Mitigation Measure 10.1 requires the project adhere to the construction noise policies in the Noise Ordinance. Following Mitigation Measure 10.1 would reduce this impact to a less-than-significant level.

Impact 4: Traffic Noise Levels at Proposed Residential Uses on the Project Site: According to the data contained in Table 10.33, future traffic noise levels are not predicted to exceed 60 dB Ldn at the proposed residential uses within the project site.

Table 10.5, below, shows that future plus project traffic noise levels are predicted to be approximately 78 and 53 dB Ldn at the exterior and interior spaces, respectively, of the residences proposed nearest to Interstate 80. These levels exceed the City of Sacramento exterior and interior noise standards applicable to new residential developments. At the residences proposed nearest to West El Camino Avenue, Table 10.5 shows that future plus project traffic noise levels are predicted to be approximately 66 and 41 dB Ldn at the exterior and interior spaces, respectively, of those residences. These levels exceed the City of Sacramento exterior noise standards applicable to new residential developments.

Because future plus project I-80 and West El Camino Avenue traffic noise levels are predicted to exceed City of Sacramento noise level standards, this impact is considered significant according to significance criteria "a".

Table 10.5

Predicted Future Traffic Noise Levels at Proposed Residential Uses

River Oaks Park Project - Sacramento, California

	Distance to Nearest Residences	Predicted Future Ldn, dB (Exterior)	Predicted Future Ldn, dB (Interior)
I-80	160	78	53
W. El Camino	100	66	41

Source: Bollard & Brennan, Inc., FHWA RD-77-108 Traffic Noise Prediction Model

Interior noise levels are based on assumption that standard construction practices will provide approximately 25 dB traffic noise reduction.

## Mitigation for Impact 4:

In order to address the traffic noise from Interstate 80-and West El Camino Avenue, Mitigation Measures 10.2 and 10.3 shall be implemented. Mitigation Measure 10.2 require the construction of noise barriers along Interstate 80 and West El Camino to reduce noise levels at the project residences to projected decibel levels below the City noise thresholds and thereby reduce projected future noise from these roadways to less-than-significant levels.

Table 10.6 also indicates that the construction of a noise barrier 6 feet in height along West El Camino Avenue would reduce future traffic noise levels to approximately 60 dB Ldn at the exterior spaces of the residences located closest to that roadway. This level is considered normally acceptable for new residential uses.

Despite the installation of sound walls along Interstate 80, further noise reduction will be required to reduce interior noise levels in residences along the Interstate to 60 dB Ldn. Implementation of Mitigation Measure 10.3 will require the project install building façade shielding to buildings nearest the Interstate-80 corridor to ensure interior noise in these residences will be below the City interior decibel threshold.

Table 10.6 Noise Barrier Performance River Oaks Project, Sacramento

Roadway	Barrier Height	Exterior Noise Level, dB Ldn
	0	78
	10	68
Interstate 80	11	68
interstate ou	12	67
	13	66
	14	65
	0	66
West El Camino	6	60
vvest Et Camino	7	59
	8	58

Source: Bollard and Brennan, Inc using FHWA Model with inputs from project site plans and Table 5

## **Mitigation Measures**

The following noise mitigation measures shall be implemented with the project to ensure less-than-significant noise related impacts.

- Mitigation Measure 10.1: Construction activities shouldshall adhere to City of Sacramento policies with respect to hours of operation, internal combustion engines shall be equipped with suitable exhaust and intake silencers which are in good working order, and other factors which affect construction noise generation and it's effects on noise-sensitive land uses.
- Mitigation Measures 10.2: Noise barriers shouldshall be constructed at the Interstate 80 and West El Camino Avenue Right of Way to reduce future traffic noise to more acceptable levels. An analysis of noise barrier performance was conducted for this project and the results are provided below in Table 10.6. The Table 10.6 data indicate that the construction of a noise barrier 14 feet in height along I-80 would reduce future traffic noise levels to approximately 65 dB Ldn at the exterior spaces of the residences located closest to that roadway. This level is within the conditionally acceptable range of 60 to 70 dB Ldn for new residential uses, and is consistent with barrier design for other newly constructed residential developments adjacent to this highway.
- Mitigation Measure 10.3: Following construction of the noise barriers recommended in Mitigation Measure 10.2, 1st floor building facades would be substantially shielded from I-80 traffic noise. As a result, future traffic noise levels within the first floor rooms of residences constructed nearest that roadway are predicted to be approximately 40 dB Ldn. This level is considered acceptable noise exposure for interior spaces of new residential developments. As a result, no improvements over standard construction would be required for the first floor facades nearest to I-80. Due to the lower predicted future traffic noise levels on West El Camino Avenue, a similar conclusion is reached regarding standard building construction for homes proposed near that roadway.

Because Interstate 80 is elevated relative to the project site, <u>T</u>the second floor facades of the residences constructed nearest to I-80 would not be completely shielded from view of that roadway by the barrier recommended in Mitigation Measure 10.2. As a result, future plus project traffic noise levels at second floor facades of the residences constructed nearest to I-80 are estimated to be approximately 78 dB Ldn. Based on this level, a building facade noise level reduction of 33 dB would be required to achieve satisfaction of the City's 45 dB Ldn interior noise level standard. Because standard construction practices only provide about 25 dB of traffic noise reduction, the following additional measures are recommended to ensure satisfaction of the City's interior noise level standards.

- All second floor bedroom windows within 125 feet of the I-80 Right of Way shouldshall have a minimum Sound Transmission Class Rating of 33.
- All second floor bedroom windows between 125 and 250 feet of the I-80 Right of Way shouldshall have a minimum Sound Transmission Class Rating of 30.

- The exterior building facades of all residences constructed within 250 feet of the I-80 Right of Way shall be constructed of stucco.
- Air conditioning shall be provided for all residences within this development to allow occupants to close doors and windows as desired to achieve additional acoustical isolation.
- For all residences constructed within 250 feet of the I-80 right-of-way, all exterior doors shall be fully weather-stripped and all exterior penetrations shall be fully sealed around their perimeters.

#### **FINDINGS**

With mitigation incorporated, the interior and exterior noise levels at the project site will be at or below City thresholds.

	Potentially Significant	Potentially Significant Impact Unless	Less-than- significant
Issues:	Impact	Mitigated	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?		Χ	
B) Police protection?			X
C) Schools?			X
D) Maintenance of public facilities, including roads?			Х
E) Other governmental services?			Χ

### **ENVIRONMENTAL SETTING**

Public services and facilities to support the population growth and construction at the project site were planned for in the South Natomas Community Plan (SNCP). The capital costs for these services are funded through the *South Natomas Public Facilities Financing Plan and Facilities Benefit Assessment*. The Financing Plan and Assessment includes provisions for the funding of needed facilities in the SNCP area include a library, community center, fire station, and transportation projects. Additional funding for transportation projects have come from the Willowcreek Assessment District 96-01 adopted in 1997. Parks are funded through Quimby Act development fees, parkland dedications, or a combination of fees and dedications. Schools in the project vicinity are funded through bonds, taxes, and separate per square foot of building area development fees.

#### **Fire Protection Services**

The City of Sacramento provides fire protection services to the project area. The Fire Department operates approximately 21 fire stations at locations throughout the City. Each station is located in a manner to provide a maximum effective service in a two-mile radius throughout the City (SGPU DEIR, M-1). The typical response time to fire calls in the City is four minutes (SGPU-DEIR, M-1).

The closest fire station to the project site is Station #15 located at 1591 Newborough Drive located approximately two miles from the project site, and is staffed by four full-time personnel. Travel time to the project site from Station #15 is approximately four minutes. The SNCP describes the existing fire station as a temporary facility and identifies the northeast side of West El Camino Avenue next to the Main Drainage Canal in Barandas Park as the location for a new fire station (SNCP, 49).

#### **Police Services**

The project site receives police services from City of Sacramento Police Department. The Department's North Substation, the William J. Kinney Police Facility, is located at 3550 Marysville Boulevard and responds to calls in the project area. The station provides police services to the South Natomas, Downtown Sacramento, and Del Paso areas with approximately 200 full-time officers (pers. comm., Morris, 2004).

#### **Schools**

The project site is located in the Natomas Unified School District. Students living at the project site will attend Two Rivers Elementary School at 3201 West River Drive for grades K-5; Leroy Green Junior High School at 2400 Unity Way Road, just south of the project site, for grades 6-8; and Natomas High School at 3301 Fong Ranch Road, for grades 9-12. The District charges development fees for residential projects in the district service area of \$3.33 per square foot.

#### **Public Streets**

Street Maintenance is an operating section of the Maintenance Services Division within the Department of Transportation. This section is responsible for maintenance and repair of the street infrastructure system which includes all paved streets in public right of ways, signs, pavement striping, traffic signals, street lighting, median landscaping, and sidewalk repairs.

The Special Districts section of the Development Services Department is responsible for planning, forming and administering all special assessment and fee districts within the city of Sacramento. Fee districts provide funding for the maintenance of streetlights, public landscaping, and city parks. In addition, districts are formed to finance public improvements (i.e., new streets, sewer and storm drainage services and streetlights, etc.) that benefit specific areas.

Roads provided in the South Natomas community are planned for in the SNCP and funded by the Major Streets Construction Tax and Assessment District 96-01 formed to cover the costs of improvements in the Plan area not funded by bonds, existing taxes, or fees and are described in the Willowcreek Financing Plan. The assessment district covers approximately 410 acres in the SNCP area, including the project site, and charges fees used to provide improvements to the transportation network and other systems (See 12. UTILITIES below).

## Library

The 13,615 square foot South Natomas Community Center and Library serving both the South Natomas and North Natomas communities opened in October 2001. The library is located on 26 acres at 2901 Truxel Road, approximately 2 ¼ miles from the project site. The *City of Sacramento Library Master Plan* guided the development of the library which was also planned for in the SNCP.

#### 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.

## **ANSWERS TO CHECKLIST QUESTIONS**

## A) WILL THE PROJECT AFFECT FIRE PROTECTION?

The project roads will meet City of Sacramento standards for emergency access. The project proposes a fire access driveway at the southeast corner of the project entering from West El Camino Avenue. The driveway reduces the time first responders require accessing housing at the southeast portion of the site bypassing the landscaping and soundwalls separating the project from West El Camino Avenue. The project site plan and building designs will be required to meet the development standards of the City of Sacramento Fire Department and State Fire Code for provision of adequate fire suppression infrastructure and water supply prior to development, ensuring the adequate provision of fire protection.

#### B) WILL THE PROJECT AFFECT POLICE PROTECTION?

The population growth expected to be associated with the project is consistent with the SNCP. The River Oaks Park area generally receives a low number of police calls, although the police are concerned about burglaries along freeway areas (pers. comm., McCray, 2004). The police protection required to serve growth at the project site was planned for during adoption of the SNCP, therefore the project is expected to have a less-than-significant effect on police protection.

## C) WILL THE PROJECT AFFECT SCHOOLS?

The district estimates new development will generate approximately seventy students for every 100 residential units. The expected student population will be comprised of forty elementary school age students, ten middle school age students, and twenty high school age students. The Natomas Unified School District indicates the lag time for this ratio to occur in a development is approximately five years. Using the district's ratios, the project subsequent to buildout will increase the student population at the district by 458 449 students as follows:

- 262 255 Elementary school students;
- 65-63 Middle school students; and
- 131 High school students.

The district anticipates having capacity to serve the project site (Phillips, 2004). By 2006, the new Heron Elementary School, currently being constructed in North Natomas, will be completed. Approximately, 400 elementary school students currently being bussed from the North Natomas area to attend Two Rivers Elementary School will be relocated to the new school, thereby freeing capacity at Two Rivers to accommodate new students living in homes constructed at the project site. The district indicates that Leroy Greene Middle School is currently under capacity and will be able to accommodate new students living at the project site. Natomas High School is also serving students bussed from the North Natomas area. These students will be relocated to the newly constructed Inderkum High School in North Natomas, located at 2400 New Market Drive (Phillips, 2004). Inderkum High School recently opened for the Fall 2004 semester. It is anticipated Natomas Unified School District schools will have adequate capacity to accommodate the additional 458 449 students expected to live at the project site. The project will contribute to the cost of providing school facilities to students living in homes constructed by the project by providing development fees, and will therefore have a less-than-significant effect on area schools.

## **D-E)** WILL THE PROJECT AFFECT MAINTENANCE OF PUBLIC FACILITIES, ROADS, OR OTHER SERVICES?

The project roads will be paid for and constructed by the developer to City of Sacramento standards. The project roadways will be in the public right-of-way and maintained by the Street Maintenance section of the Maintenance Services Division within the Department of Transportation. The funding for roadway maintenance activities comes from gas taxes, sales tax, and assessment fees. The project trailhead, trails, and park areas will become a part of the Department of Parks and Recreation system and will be maintained by the department, the developer, and funded though taxes and development fees (See 13. RECREATION). The maintenance of public facilities and roads at the project site are funded through the Major Streets Construction Tax and assessments identified during the preparation of the SNCP, the Willowcreek Financing Plan and the formation of Assessment District 96-01 and South Natomas Public Facilities Financing Plan and Facilities Benefit Assessment and therefore have a less-than-significant effect on public facilities. The project is required to pay its share of these assessments as conditions of project approval and will therefore have a less-than-significant effect on the maintenance of public facilities and roads.

#### **Mitigation Measures**

#### **Proposed**

None

#### Recommended

No further mitigation measures are recommended

#### **FINDINGS**

The project is consistent with the expected population growth in the SNCP, and thereby the expected need for police and emergency services in the area. The project will build new roads and contribute to development fees for schools, and other public facilities, and will thereby provide its share towards the provision of these facilities to the community.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than- significant Impact
12. <u>UTILITIES</u>			1
Would the proposal result in the need for new systems or supplies, or substantial alterations to the following utilities:			
A) Communication systems?			Χ
B) Local or regional water supplies?		X	
C) Local or regional water treatment or distribution facilities?		Х	
D) Sewer or septic tanks?		X	
E) Storm water drainage?		X	
F) Solid waste disposal?		X	

#### **ENVIRONMENTAL SETTING**

## **Communication Systems**

SBC provides telephone and internet service to the project site and has wiring and facilities located along West El Camino Avenue. Federal, state, and local government agencies and airports use radio and microwave repeaters mounted on rooftops, and radar dishes at various locations for important communications activities in the region. Many existing systems require a clear line of sight for dependable communications, and obstacles created between the sending point and receiving point can block communications or create a "blind spot" in the communication system.

#### Water, Sewer, and Storm water Service

The City of Sacramento Department of Utilities is responsible for providing and maintaining water, collection, storm drainage and flood control services for residents and businesses in the City of Sacramento. In addition, the Department of Utilities promotes water quality protection and water conservation through various citywide programs. Sewer service is provided by the Sacramento Regional County Sanitation District #1 (CSD-1).

## Water Supply and Treatment

The City provides water to more than 120,000 customer accounts representing approximately 400,000 people. The City currently provides water service from a combination of surface and groundwater sources (SGPU DEIR, H-1). Currently the City operates two active water diversion and treatment facilities. The Sacramento River Water Treatment Plant has a reliable capacity of 110 million gallons per day (mgd), and the E.A. Fairbairn Water Treatment Plant has a reliable capacity of 90 mgd. In addition to these water treatment facilities, the City also operates and maintains 10 storage reservoirs, 25 active municipal water wells, and approximately 1,420 miles of water mains ranging from four to 60-inches in diameter. This results in a total of 445 mgd of reliable water treatment capacity (wells and treatment plants).

The maximum daily usage for the fiscal year 2002/2003 was 206 mgd, resulting in an available capacity of 239 mgd (City of Sacramento, 2004).

The SNCP planned for the provision of water and sewer services in the project area. Water and sewer services to the project site are funded by several mechanisms including: sewer fees collected by the Sacramento County Regional Sanitation District, water connection fees (both assessed on developers), and the additional development fees district established by the *Willowcreek Financing Plan*. The *Willowcreek Financing Plan* formed Assessment District 96-01 to cover the costs of improvements in the Plan area not funded by bonds or fees. The assessment district covers approximately 410 acres in the SNCP area, including the project site, and charges fees used to provide improvements to the water, sanitary sewer, drainage system, joint trench and utility, and to cover soft costs (engineering, design, testing, staking and administration) (EPS, 1997).

## SB 610 Water Assessment and SB 221 Water Supply Verification

Senate Bill 610 (Chapter 643, Statutes of 2001) and Senate Bill 221 (Chapter 642, Statutes of 2001) amended state law, effective January 1, 2002, as companion measures intended to promote more collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability to be provided to city decision makers prior to approval of specified large development projects. This information will serve as the evidentiary basis for an approval action by the City of Sacramento with regard to sufficient water supply to serve the proposed project.

The City's municipal water has two independent water sources. The primary water source is river water from the Sacramento and American Rivers, which provide 85% of the City's supply. Groundwater provides the other 15% of the City's supply. The City of Sacramento Department of Utilities completed an assessment of potential contaminating activities for the Sacramento and American Rivers in December 2000 and April 2001 respectively. These reports indicated both rivers were vulnerable to contaminants from recreational activities and that the Sacramento River water is considered to be of good quality, but vulnerable to higher sediment loads and extensive irrigated agriculture from activities upstream of Sacramento, which tends to degrade the water quality by introducing large amounts of herbicides and pesticides into the river (CSDU, 2002).

#### SB 610 Assessment

The proposed project is subject to the requirements of SB 610 because it constitutes a project, as defined in Water Code Section 10912 and is subject to the California Environmental Quality Act, Division 13, commencing with Section 21080 of the Public Resources Code. Specifically, it is a proposed residential development of more than 500 dwelling units that will be connected to a public water system that has 3,000 or more service connections. Therefore, the water supplier, the City Department of Utilities, must prepare a SB 610 assessment within 90 days of receiving a request must be prepared prior to certification of the EIR.

The primary issue to be addressed by the SB 610 assessment is whether the projected supply of the next 20 years-based on the normal, single dry, and multiple year dry years, will meet the demand project for the project plus existing and planned future use, including agricultural and manufacturing uses. Three areas must be addressed in reaching an answer.

First, the assessment shall include, quantify and demonstrate future water supply.

Second, if no water received in prior years under items identified in first supply inquiry, identify other water suppliers or service contract holders that receive supply or have rights to the same source identified by the water supplier or agency.

Third, if the source for the project includes groundwater, factors and specifications related to groundwater source must be included.

The water supplier must make a conclusion as to the primary issue for assessment. If the assessment concludes the water supply is sufficient, the governing body of the water supplier (or lead agency) must approve the assessment at a regular or special meeting and deliver the assessment to the requesting agency within ninety days of the original request. If the assessment concludes the water supply is not sufficient, the water supplier shall provide the lead agency "its plans for acquiring additional water supplies, setting forth measures that being undertaken to acquire and develop additional water supplies.

## **Urban Water Management Plans**

According to Water Code Section 10910(c)(2), if the project water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information form the urban water management plan in preparing the elements of the assessment. According to Water Code Section 10910(3), if the project water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, the water assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a twenty-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses.

In considering the project the lead agency shall determine, based on the entire record, whether projected water supplies will be sufficient, or not sufficient to satisfy the demands of the project and include that determination in its findings for the decision on the project. The lead agency will approve or disapprove the project based on a number of factors, including, but not limited to, the water supply assessment.

## SB 221 Water Supply Verification

SB 221 requires the lead agency approving a tentative subdivision map for subdivisions defined in Government Code Section 66473.7(a) as containing 500 or more dwelling units, to condition approval upon the requirement that a sufficient water supply shall be available. No later than five days after the lead agency has determined the application for the proposed subdivision complete, the agency shall send a copy of the application to the water supplier.

Either the lead agency or the project applicant, at the discretion of the lead agency, shall request from the water supplier a written verification of the availability of sufficient water supply.

The City Department of Utilities (the water supplier) is required to prepare a<u>A</u> water supply verification-<u>is required</u> that evaluates whether total projected water supplies are sufficient to meet the project's anticipated water demand.

Verification must conclude whether the water supplier is able, or unable to provide a sufficient water supply based upon an analysis as to whether water supplies available during normal, single-dry, and multiple-dry years within a twenty-year projection that will meet the projected demand of a proposed subdivision, in addition to existing and planned future uses. All of the following must be considered in the verification:

- Historical record for at least twenty years;
- Urban water shortage contingency analysis;
- Supply reduction for specific water use sector per Water Supplier resolution, ordinance, or contract; and

Amount of water that can be reasonably relied upon form specified supply projects, subject to the determinations outlined in Government Code Sections 66473.7(a)(2), (c), and (d).

#### **Water Conservation**

Water conservation practices were implemented through City ordinances as early as 1967, and have continued to evolve with available conservation technology. In 1991, in response to a drought, the City became a signatory to a statewide Memorandum of Understanding (MOU). The purpose of the MOU is to expedite implementation of reasonable water conservation measures in California's urban areas and to establish appropriate assumptions for use in calculating estimates of reliable future water conservation savings. A list of sixteen BMPs were identified as part of the 1991 MOU.

## Sewer System

The sewage system serving the project site has two major components, conveyance, and treatment. The two systems are planned in through two separate processes. Conveyance of sewage flow is planned for by the County of Sacramento Department of Water Quality in the *SRCSD Interceptor Master Plan*. The Master Plan uses land use plans to estimate the conveyance system needed to accommodate growth anticipated in the South Natomas area (SRCSD, 2004).

CSD-1 provides sewage treatment services to the project site. The districts are responsible for the construction, maintenance and operation of all regional interceptors and wastewater treatment facilities. The District operates the Sacramento Regional Wastewater Treatment Plant. This 181-million gallons per day (mgd) treatment plant serves the metropolitan Sacramento area and a population of over 1,000,000 people. The plant is the largest river discharging plant in California. The Plant provides a primary, secondary level of treatment and disinfection before discharging treated water into the Sacramento River (SRCSD, 2004).

## Storm water Water

The City of Sacramento storm water conveyance system is a network of natural channels, canals, levees, subsurface drains, and pumping systems. All drainage from the project site is flows into the Main Drainage Canal and ultimately to the Sacramento River. As stated in 4. WATER, development on the project site will be required to comply with the City's Storm water Management and Discharge Control Code, Chapter 13.16 of the City Code. The City Storm water Water Code is a comprehensive program implementing controls to reduce storm water pollution and protect water quality consistent with the federal Clean Water Act, the State

Porter-Cologne Water Quality Control Act and the National Pollutant Discharge Elimination System (NPDES) permit issued to the City of Sacramento. The project will be required to follow the City of Sacramento Department of Utilities guidelines for stormdrain system and stormwater retention detention basin construction. The applicant shall submit a preliminary drainage plan which contains Best Management Practices (BMP) and incorporates Best Available Control Technology (BACT) meeting Department of Utilities standards prior to construction. See 4. WATER for a thorough discussion of project related storm water management.

#### **Solid Waste**

To comply with requirements for waste stream diversion in the California Integrated Waste Management Act of 1989, the City of Sacramento Public Works Solid Waste Division provides residential waste collection and curbside recycling to the project area. The Division collects the solid waste from the project area to the Sacramento Recycling and Transfer Station located at Fruitridge Boulevard and Florin Perkins Road. BLT Enterprise of Sacramento Inc., sorts the waste for recyclables, and hauls the remaining solid waste to the Lockwood Land Fill outside Storey Nevada. The City has a solid waste diversion rate between 50 and 55% (Root, 2004). The Lockwood Landfill has a capacity 64,802,000 cubic yard capacity, receives approximately 6,000 tons of garbage a day, of which about 2,270 tons a day comes from Nevada and 2,320 tons come from California, and 600 tons comes from the City of Sacramento (Root, 2004. Private haulers, builders, and demolition companies bring in the rest. The Lockwood Landfill is projected to have capacity for another 34 years (SWMP, 2004).

### STANDARDS OF SIGNIFICANCE

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

- Result in a detriment to microwave, radar, or radio transmissions;
- © 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; or

Generate storm water that would exceed the capacity of the storm water system.

## **ANSWERS TO CHECKLIST QUESTIONS**

## A) COMMUNICATION SYSTEMS?

The project consists of two-story residential units consistent with the development called for in the SNCP and the height limits set in the City Zoning regulations and will not be of a height expected to interfere with microwave, radar, and radio communications transmissions, and will therefore have a less-than-significant effect on communication systems.

## B-C) LOCAL OR REGIONAL WATER SUPPLY TREATMENT OR DISTRIBUTION?

## **Estimated Water Supply**

The City Department of Utilities estimates the City's total fresh water treatment system to have a capacity of 445-million gallons per day (mgd), or 498,644-acre feet per year. The available fresh water supply above current demand is 239 mgd, or 267,811-acre feet per year (pers. comm., Johnson, 2004).

## **Estimated Project Water Demand**

The City of Sacramento Department of Utilities uses the following calculations to estimate water use:

- 3.6-acre feet/ acre per year for low and medium density residential use
- 4.0-acre feet/ acre per year for high density residential; and
- \_\_4.2-acre feet/ acre per year for irrigated parks and open space areas. Note that for parks over four acres in size, groundwater pumps may be required (separate from the City water system) (pers. comm., Johnson 2004).

The proposed project will have  $\pm 58.2852.10$  acres of residential development projected to use approximately 209.73187.56-acre feet of water per year. The project's  $\pm 9.8011.06$  acres of park and recreation center is projected to use  $\pm 41.1646.45$ -acre feet of water per year. The project's combined water demand is estimated at approximately 250.89234.01-acre feet annually. The proposed project will utilize less than 0.1% of the available fresh water capacity of 267,811-acre feet of water per year (See *Table 12.1*).

Table 12.1
Estimated Project Water Demand

Project Land Use	Estimated Water Demand Per Acre	Estimated Annual Water Demand
Residential ±58.2852.10 acres	3.6-AFY	<del>209.73</del> 187.56
Parks ±9.8011.06 acres	4.2-AFY	<del>41.16</del> 46.45
Total Annual Project Demand		<del>250.89</del> 234.01-AFY

Source: City of Sacramento AFY= Acre Feet Per Year

The project is consistent with the water demand planned for in the SNCP. In order to conserve treated water and conserve energy expended to treat and pump water, the project shall be required to implement water conservation into construction and incorporate drought tolerant planting into landscaping. Implementation of water conservation requirements in as required by *Sacramento City Code* Section 15.92 will ensure the project reduces water consumption to the extent feasible and will therefore have a less-than-significant effect on City water supply.

<u>Mitigation Measure 12.1 requires the As part of the Improvement Plan process, the City may require</u> project applicant to demonstrate the feasibility of using wells to provide irrigation to the project parkland and open space areas, thereby further reducing the project's reliance on treated water. The project will have a less-than-significant impact on treated water supply with mitigation.

## D) SEWER?

The Sacramento Regional County Treatment Plant located off Franklin Boulevard in Elk Grove has an existing capacity of approximately 181 million gallons per day (mgd), of dry weather flow, and 392 mgd of wet weather flow (SGPU). Each day the plant treats an average of 165 million gallons of wastewater (SRCSD, 2004). The proposed project's 654–642 single-family residential units will generate sewage flow consistent with the development of the 422-710 single-family homes planned for the site in the SNCP (SNCP, EIR).

The County of Sacramento Department Water Quality determines flow for single-family Planned Unit Developments to have a flow of 232 gallons per residential unit per day for developments where the actual units per acre are known. However, the department director may assign up to 310 gallons per residential lot where individual units are similar to single family detached residential units. The Department determined these estimates of flow associated with development while projecting the sewage treatment capacity needed to accommodate growth in the Sacramento Area during the preparation of the 2020 Wastewater Master Plan for the Sacramento Regional Wastewater Treatment Plant (pers. comm., Allen, 2004).

The project proposes to construct—654\_642 units and generate between 151,960149,172 and 203,050199,020 gallons of flow daily. The flow expected from the project is well within the remaining 16 million gallons capacity of the Sacramento Regional County Treatment Plant and will therefore have a less-than-significant impact to wastewater treatment.

The conveyance system serving the project runs north to San Juan Road then east to the County pump station then east to the central interceptor and has the capacity to accommodate project flows. The NAT-1 trunk line is proposed in the CSD-1 Master Plan for construction in Orchard Lane. This pipe diameter will be twelve-inches long and planned for construction after the year 2011. In order to obtain sewer service, construction of public sewer is expected to be required. Sewer easements may be required. Trunk sewer design and construction may be subject to a reimbursement agreement with the CSD-1. CSD-1 issues sewer connection permits on a "first come, first serve" basis and provides no guarantee that capacity will be available when actual requests for sewer service are made. Once connected the property has the entitlement to use the system limited to the capacity accounted for by payment of fees to CSD-1 (pers. comm., Morgan, 2004).

The project will connect into the existing sewer trunk line in Orchard Lane. The Orchard Lane trunk line may require upgrades to accommodate the flow from the project and will require analysis in a project sewer study prior to development (Ferguson, 2004). Mitigation Measure 12.12 requires the preparation of a project sewer study to ensure the project sewer infrastructure integrates with the existing municipal conveyance system in accordance with County and City requirements. The sewer study will contain detailed information about the onsite sewer system and the ability of the existing sewer lines in Orchard Lane and West El Camino Avenue to accommodate project sewage flows. The sewage study ensures the sewage conveyance system

will have the capacity to serve the project site. The project will have a less-than-significant effect on municipal sewer conveyance systems with mitigation.

## E) STORM WATER DRAINAGE?

The project proposes to construct a ±1.42 acre water quality basin to control storm water runoff and provide a place onsite for suspended materials to settle out of the runoff from the site. The project will be required to follow established BMP guidelines or pollution control requirements as established by the enforcement official and the City Grading, Erosion, and Sediment Control Ordinance as described in *4. WATER*. With implementation of Measures 4.1 through 4.6, the project will have a less-than-significant effect on storm water drainage systems.

## F) SOLID WASTE DISPOSAL?

The City would provide solid waste removal and recycling service to the project site and anticipates adequate capacity in the Lockwood Landfill to serve the project along with existing and future development waste disposal needs for the City. The City charges fees for solid waste removal services and scales the magnitude of the operations to meet the revenues generated by service demands (Root, 2004). The development proposed at the project site is consistent with the residential development density and the solid waste generation planned for in the SNCP.

According to the City Solid Waste Division, the average solid waste generated by residential development in the City is approximately five lbs. per day (Root, 2004). At the average household size of 2.65 persons per single-family home in the City, the estimated project population of 1,8761,701 persons will generate 9,3808,507 lbs. of solid waste per day, and 3,414,320-3,104,872 lbs. or approximately 1,701-1,552 tons of waste per year. The City diversion rate of recyclable materials has improved in the years subsequent to adoption of the SNCP, reducing the solid waste generation. Approximately 50- 55%, or between 850-776 and 935853 tons of the project's solid waste would be recycled. The remaining 766-699 to 850-776 tons will be transferred to the Lockwood Landfill in Nevada.

The City anticipates having the transport and service capacity to accommodate the solid waste generated by the project. Mitigation Measure 12.23 requires the applicant to recycle construction materials and *Sacramento City Code* Section 17.72 requires the project residences participate in the City's residential trash, recycling, and garden refuse programs. This includes recycling of paper, cardboard, plastic, glass, metals, and organic yard materials. The solid waste generated by the project will be minimized by diversion and recycling and will thereby reduce project related impacts to solid waste to a less-than-significant level.

#### Mitigation Measures

**Proposed Mitigations** 

None.

#### Recommended Mitigations

Mitigation Measure 12.1: The project applicant shall demonstrate the feasibility of providing irrigation to the project site parks and open space areas via well(s). The

feasibility analysis shall include well boring and flow tests. The analysis will include estimates of aquifer drawdown and recharge during single wet and multiple dry years in order to assess the potential dewatering of the site and be used to determine how much groundwater will be used for onsite irrigation.

Mitigation Measure 12.12: The project applicant shall provide a project sewer study prepared by a qualified engineer. The sewer study shall contain detailed drawings and information regarding the onsite conveyance system and the existing sewer trunk lines in Orchard Lane. The study shall include provisions for access and maintenance easements as per County Sanitation District 1 (CSD-1) standards. The study shall also meet the approval of the City of Sacramento Department of Utilities and the CSD-1 prior to issuance of a building permit.

*Mitigation Measure* 12.23: The project applicant shall prepare a construction material recycling program for the construction site including glass, wood, cardboard, paper, glass, and metals.

#### **FINDINGS**

The project with mitigation measures incorporated will remain within the service thresholds of the utility providers serving the South Natomas Community and not impact existing service levels.

		Potentially	
	Potentially	Significant Impact	Less-than-
	Significant	Unless	significant
Issues:	Impact	Mitigated	Impact
13. AESTHETICS, LIGHT AND GLARE			
Would the proposal:			
A) Affect a scenic vista or adopted view corridor?			Х
B) Have a demonstrable negative aesthetic			
effect?			X
C) Create light or glare?		Х	
D) Create shadows on adjacent property?			X

## **ENVIRONMENTAL SETTING**

The project site is visually characterized by agricultural land and is surrounded by urban scenes of streets, the Interstate 80 freeway, residential homes, and offices. The Main Drainage Canal adds aesthetically to the site providing the visual relief to the scene with its tree and vegetation lined waterway. Subsequent to development, the site will take on the visual character of a residential subdivision of one and two story homes with parks, trails, community clubhouse and pool, and landscaping.

The applicant has submitted the *River Oaks Planned Unit Development Guidelines* prepared by Morton & Pitalo, Inc. February 18, 2004. The guidelines were prepared to specify a common

design theme for all the lands within the River Oaks project area. The Guidelines also establish design standards for the proposed project including for circulation and parking; building designs; zoning and land use standards; and open space area designs and use.

## Lighting

Currently, the site is indirectly lighted at night by nearby streetlights located along West El Camino Avenue and Interstate 80 and the lights from adjacent developments. The purpose of site lighting is to provide proper site visibility, guide movement at the site, and provide security. Aesthetically, lighting is used to emphasize signs, architectural and landscape features, and impart character to a project.

#### Glare

There are several types of glare including direct glare, reflected glare, discomfort glare, and disability glare. Direct glare is caused by a light source such as a light fixture or the sun. Sources of glare can also be surfaces, which, after being illuminated by direct lighting or other indirect sources have measurable luminance, and in turn, become glare sources themselves. Glare can produce various levels of discomfort that may or may not impair visual performance and visibility depending on the intensity.

Potential sources of light and glare associated with the project at nighttime would be from lights and structural building features made of glass, metal, and painted surfaces, and from vehicles visiting the site; and in the daytime from building materials and off vehicles using the site. Automobiles and other vehicles will increase daytime glare by increasing reflective surfaces at the site (glass, metal, painted surfaces, and chrome). Glare onto roadways adjacent to development could pose a risk to drivers if it impairs visibility.

#### STANDARDS OF SIGNIFICANCE

*Shadows*. New shadows from developments are generally considered to be significant if they would shade a recognized public gathering place (e.g., park) or place residences/child care centers in complete shade.

*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.

## ANSWERS TO CHECKLIST QUESTIONS

## A) AFFECT A SCENIC VISTA OR ADOPTED VIEW CORRIDOR?

The project is located on the floor of the Sacramento Valley and is not located adjacent to scenic vistas. The proposed project site is not located in a local or state designated scenic area. Highways 80 and 5, and West El Camino Avenue are not designated Scenic Highways or roadways by the State of California, or in the SGPU. Therefore, implementation of the project will not affect a designated scenic vista or adopted view corridor.

#### B) HAVE A DEMONSTRABLE NEGATIVE AESTHETIC EFFECT?

During development of the proposed project, machinery, temporary staging buildings and construction materials, storage areas would be located at the project site. Subsequent to the temporary construction period, the site would be developed with 654 residences, community parks, and supporting roadways. The proposed project when constructed will change the current visual character of the site from agricultural to that of urban residential and community parkland.

The project applicant has submitted design drawings for the proposed residences using thirteen different floor plans and four architectural styles The architecture of the project incorporates decorative features such as cornices, gables, porticos, pilasters, balconies, and distinct window treatments such as shutters and decorative frames. The project incorporates parks and landscaping which utilize trees and shrubbery to improve onsite aesthetic effects. The location of heating and ventilation

The project is proposing to place residential units in close proximity to Interstate 80 and West El Camino Avenue. Residences located adjacent to a freeway and arterial route may be subject to the adverse visual aesthetics of busy roadways. The SNCP designates the land at the project site, including that along the freeway frontage for residential development. The applicant is proposing a combination of sound wall and landscaped berm to shield the development from visible, and sound related impacts. SNCP Noise Implementing Policy H. encourages alternatives to sound walls to achieve aesthetic landscaped corridors (SNCP, 41). The project applicant is proposing the use of landscaping along project sound walls, project entryways along roads, open space, and around the water quality basin to ensure the project has a positive aesthetic effect consistent with Chapter 17.68 of the Sacramento City Code.

## C) CREATE LIGHT OR GLARE?

The project proposes to construct homes and parkland along Interstate 80 and homes along West El Camino Avenue. Although lighting details of the proposed project have not been submitted, project lighting is expected to include street lighting, exterior home lights, and sport field lights and parking lot lights at parks and the community center. Light and glare from homes may potentially shine towards roadways. The project will be required to comply with Mitigation Measures 13.1, 13.2, and 13.3 to reduce lighting and glare and adhere to all City lighting development standards including *Sacramento City Code* Chapters 15.80 and 17.24 to ensure potential lighting and glare impacts are less-than-significant.

## D) CREATE SHADOWS ON ADJACENT PROPERTY?

The project is constructing two story homes on land designated in the SNCP for residential land use with expectation that a certain amount of shadows from buildings and trees will result. The residences will be required to conform to the height limits established for the residential zoning district proposed for the site. The shadows cast by the project buildings and trees are consistent with the type of development planned for in the SNCP and will therefore have a less-than-significant effect on adjacent properties.

## **Mitigation Measures**

## **Proposed Mitigations**

None

## **Recommended Mitigations**

- Mitigation Measure 13.1: Lighting in project parks and residential areas shall be designed and oriented as not to produce hazardous and annoying glare to motorists on Interstate 80 and West El Camino Avenue, or to occupants of buildings and residents on adjacent properties.
- Mitigation Measure 13.2: Lighting shall be oriented away from adjacent properties and not produce a glare or reflection or any nuisance, inconvenience or hazardous interference of any kind on adjoining streets or property.
- Mitigation Measure 13.3: Building materials and glass used in construction oriented towards Interstate 80 and West El Camino shall have non-reflective, or low-glare properties.

## **FINDINGS**

The project integrates architectural styles, landscaping, open space, and parks consistent with City design principals and will be required to utilize building materials consistent with the landscaping, light and glare, provisions in the City building and zoning code.

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

#### **ENVIRONMENTAL SETTING**

The project site is located outside the cultural resources Primary Impact Areas as defined by the SGPU and an area west of the project site is identified on the Sacramento County General Plan Cultural Resources map as an area of moderate sensitivity for prehistoric and historic resources. Intensive cultivation, grading and other construction activities in the project are have resulted in substantial surface and subsurface disturbance in the project area.

A cultural resource assessment of the project site was prepared entitled *Cultural Resources Inventory of the River Oaks Park Project Sacramento, California* and is attached to this Initial Study as Appendix 10. Research for the assessment consisted of consulting publications, reports, and

records on file with the California Historical Resource Information System, North Central Information Center (NCIC), at California State University, Sacramento and was carried out in January 2004. Research was also conducted in the Sacramento County Tax Assessor Records for the area on file at the Sacramento Archives and Museum Collections Center and other resources. Letters were written to the State Office of Historic Preservation (OHP) and the Native American Heritage Commission (NAHC), and to any individuals or organizations designated by them, requesting relevant information on the project area. A field survey was conducted also. The intensive records and field searches of the project site did not identify any new cultural resource information (PAR, 2004).

The Main Drainage Canal which defines the project east boundary is a contributing component to the National Register-eligible Reclamation District 1000 (RD, 1000) Rural Historic Landscape District (Dames and Moore, 1995). The Natomas Company built the RD 1000 in 1911 to open the flood prone American Basin to agricultural and residential use. The Army Corps of Engineers (Corps) and the California Office of Historic Preservation (OHP) determined in 1994 that RD 1000 is eligible for inclusion in the National Register of Historic Places due to its location, materials, and design (PAR, 2004).

Until recently, most of the project area was under agricultural cultivation. The site includes three former residential sites, including the Souza and Rosa residences. Historic records indicate the Rosa farm dwelling was established in the 1930s (PAR, 2004).

## 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.

CEQA Guidelines Section 15064.5 defines a significant historical resource as a resource listed or eligible for listing in the California Register of Historical Resources (CRHR). Any resource that has been determined eligible for inclusion in the National Register of Historic Places (NRHP) is considered eligible for the CRHR. Any resource included in a local register of historical resources as defined in Public Resources Code 5020.1(k), or that has been identified in a historical resources survey that meets the requirements of Public Resources Code 5024.1(g), are presumed to be historically significant. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant may be included.

A substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired as defined in CEQA Guidelines Section 15064.5(b)(2). If impacts to archaeological resources would occur, then the lead agency must determine if the site is a historical resource as defined by CEQA Guidelines 15064.5 (a). If the archaeological site is determined to be a historical resource, then

the archaeological site shall be treated under the provisions of Public Resources Code Section 21084.1 and Section 15126.4 of the CEQA Guidelines.

## **ANSWERS TO CHECKLIST QUESTIONS**

## A) - E) DISTURB PALEONTOLOGICAL, ARCHEOLOGICAL, HISTORICAL, ETHNIC OR CULTURAL RESOURCES?

The project site is not located in an area identified as having significant cultural, historical, or paleontological resources by the City or by the cultural resource assessment surveys. Since the project site has been disturbed by agricultural activity since being drained earlier in the 20<sup>th</sup> century, the potential for the project to impact these types of resources is considered low (PAR-2004).

However, subsurface resources may potentially exist onsite and may be discovered during construction of the project. In the event the project uncovers or paleontological, archaeological, historical significance, or items of ethnic value, implementation of Mitigation Measures 14.1 and 14.2 will ensure protection of cultural resources, thereby reducing the potential project related impacts to cultural resources to less-than-significant levels.

However, the project proposes to construct a pedestrian bridge across the Canal, a structure eligible for listing on the National Register of Historic Places. Although specific bridge designs have not been submitted, if the project proposes to alter the structure of the Canal, it must comply with Section 106 of the National Historic Preservation Act. Mitigation Measure 14.3 requires construction of the pedestrian bridge to avoid impacts to the Canal structure. The project shall be required to comply with Mitigation Measure 14.3 requiring consultation with the State Historic Preservation Officer (SHPO) if the project changes or the pedestrian bridge proposes to alter the Canal, and reducing the potential of affecting an important historic resource. The project contains no component that will restrict or otherwise impede religious or sacred use in the project area and will therefore have a less-than-significant effect on such activity.

## **Mitigation Measures**

#### **Proposed Mitigations**

None.

## Recommended Mitigations

Mitigation Measure 14.1: If subsurface archaeological or historical remains are discovered during construction, work in the area shall stop immediately and a qualified archaeologist and a representative of the Native American Heritage Commission shall be consulted to develop, if necessary, further mitigation measures to reduce any archaeological impact to a less-than-significant level before construction continues.

Mitigation Measure 14.2: If human burials are encountered, all work in the area shall stop immediately and the Sacramento County Coroner's office shall be notified immediately. If the remains are determined to be Native American in origin, both

the Native American Heritage Commission and any identified descendants must be notified and recommendations for treatment solicited (CEQA Section 15064.5); Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and 5097.98.

Mitigation Measure 14.3: If the proposed design of the pedestrian bridge or any changes to the project are proposed that would have the potential to change or alter the structure of the Main Drainage Canal, including the lining of the Canal, or would adversely affect the Canal's eligibility for inclusion on the National Register as a component of the RD 1000 Rural Historic Landscape District, additional evaluation of the project effect and consultation with the California State Preservation Officer (SHPO) would be required. Additional mitigation measures may be required by SHPO to resolve adverse project effects.

#### **FINDINGS**

The project shall be required to comply with state and local provisions ensuring the protection of cultural resources and will thereby not create an adverse impact to these resources.

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

#### **ENVIRONMENTAL SETTING**

The project plan proposes to construct housing that to accommodate approximately 1,880 persons at buildout and full occupancy. The project is proposing to create  $\pm 9.2311.06$  acres of parkland, a recreation center on  $\pm 0.50-51$  acres, a trailhead on  $\pm 0.20$  acres, and a pedestrian, and bicycle trail and bridge on  $\pm 4.504.52$  acres along the Canal levee.

## **Regulatory Setting**

The City of Sacramento plans for future parks and provides for the maintenance of existing parks through the City of Sacramento Parks and Recreation Master Plan. The purpose of the Master Plan is to craft and implement a vision of the City's recreational parks reflective of the communities residing in the City. The City is currently updating the Master Plan. The Sacramento Bikeways Master Plan is a part of the City's Alternate Modes Program aimed at providing alternatives to automobile use in the City.

## STANDARDS OF SIGNIFICANCE

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

## **ANSWERS TO CHECKLIST QUESTIONS**

## A) INCREASE THE DEMAND ON PARKS?

The increase in population at the project site would increase demand for use of area and regional parks facilities. The project includes the development of ±9.2311.06 acres of parks, open space, and recreation related facilities. The project will develop two new parks, one at the northwest corner of the project site, another at the northeast corner. The project will also construct a recreation center to serve the new community and extend the City's network of bicycle trails along the project's west boundary, and provide a trail through the linear park along I-80 (See Figure 1.7). SNCP Guiding Policy D has a goal of five acres of parks for every thousand population (SNCP, 45). City of Sacramento Parks and Recreation Master Plan Update 2004 Goal 13.1 is to provide 2.5 acres of community and 2.5 acres of neighborhood parks for every thousand in population.

The parks will include facilities common to community and neighborhood parks in the City of Sacramento including lighted and unlighted sport fields and courts, playgrounds, picnic areas, restroom facilities, trails and walkways, driveways and parking areas. Parks are landscaped with shrubs, trees and grassy field areas. The City of Sacramento Bikeways Master Plan with Amendments Natomas Area calls for both on street and off street bicycle facilities at the proposed project site.

#### Parkland dedication

The parkland dedication of  $\pm 9.23 \underline{11.06}$  acres will be credited to the developer against the Parks dedication required by the City pursuant to Section 16.64.030 of the Sacramento City Code. The City requires the equivalent of .0149 acres of parkland (or in lieu fees equal to the value of the land) for each single-family unit of development. The parkland dedication required by the City for the  $\underline{654}$ – $\underline{642}$  single-family units proposed for this project will be  $\pm \underline{10.559.61}$  acres. The developer will be required to dedicate the equivalent of an additional  $\pm 1.32$  acres of parkland.

The developer is also required per Section 16.64.030 of the *Sacramento City Code* to provide full street improvements, fencing meeting city standards along the property line, and surface drainage through the site; and provide other improvements the city council determines to be essential to the acceptance of the land for park purposes.

The proposed parks and recreation facility and trails will be located in a manner consistent with Parks and Recreation Master Plan Goal 13.1, which calls for providing public recreational opportunities within reasonable walking or driving distance of all residents and concentrations of worker populations along safe routes (SPRMU, P5).

Parkland dedications, and/or fees and formation of a parks district in accordance with City regulations in accordance with City Code Chapter 16.64, ensures the project will have a less-than-significant effect on parks. The City Parks and Recreation Department does not count

trails towards the parks acreage requirements. Trails count towards the Bikeway Master Plan (pers. comm., Haenggi, 2004).

## B) AFFECT EXISTING RECREATIONAL OPPORTUNITIES?

The project will increase the existing recreational opportunities in the City by developing additional parkland, recreational facilities, and trails. The increase in parkland acreage and facilities at the project site will help meet the SNCP goals of for parks by providing additional recreational opportunities in the SNCP community. By providing new recreational opportunities for residents of the proposed project, the project is providing its share of recreation facilities and will have a less-than-significant impact on existing recreational facilities.

## **Mitigation Measures**

## **Proposed Mitigation**

None.

## Recommended Mitigation

No further mitigation recommended.

#### **FINDINGS**

The project will meet the City's recreational parkland requirements and will therefore not significantly affect recreational resources.

		Potentially	
		Significant	
	Potentially	Impact	Less-than-
	Significant	Unless	significant
Issues:	Impact	Mitigated	Impact
16. MANDATORY FINDINGS OF			
<u>SIGNIFICANCE</u>			
Would the proposal:			
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		N/	
history or prehistory?		<u>X</u>	X

Travers	Potentially Significant	Potentially Significant Impact Unless	Less-than- significant
Issues:	Impact	Mitigated	Impact
B. Does the project have the potential to			
achieve short-term, to the disadvantage of			37
long-term environmental goals?			X
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.)			X
D. Does the project have environmental effects			
which will cause substantial adverse effects			
on human beings, either directly or			
indirectly? Disturb paleontological			
resources?		X	X
		_	

## **Mandatory Findings of Significance Discussion**

As discussed in the previous section of this document, the project has incorporated mitigation measures that reduce and eliminate the potential for the project to degrade the quality of the environment. Mitigation measures incorporated into the project reduce impacts to air, water, wildlife habitat, and cultural resource values to less-than-significant levels

The project is proposing to construct 654-642 single-family homes consistent with the long-range community goals established in 1988 with the adoption of the SNCP, which calls for development at the project site of between 422 to 710 housing units, and the environmental impact analysis contained in the SNCP EIR. Therefore, the project is not achieving short-range development goals to the disadvantage of long-range goals, rather it is meeting them both.

The project is consistent with the community wide development planned for in the SNCP. During planning for the SNCP, the environmental effects from development of housing at project site and development of the surrounding areas was considered in the SNCP EIR. The project when considered cumulatively with existing projects and with potential projects in the SNCP poses no additional cumulative environmental effects beyond those considered in the SNCP and this environmental document.

This environmental document has considered the potential project related environmental effects on humans and has required implementation of mitigation measures and a Mitigation Monitoring and Reporting Program to ensure the direct and indirect project related impacts to humans are reduced to insignificant levels.

## **SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

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

Land Use and Planning	X	Hazards
— Population and Housing	X	Noise
X Geological Problems	X	Public Services
X Water	X	Utilities and Service Systems
X Air Quality	X	Aesthetics, Light and Glare
X Transportation Traffic / Circulation	X	Cultural Resources
X Biological Resources	X	Recreation
X Energy and Mineral Resources	<u>X</u>	Mandatory Findings of Significance
None Identified		

## **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.

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
Printed Name	

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## PERSONS CONTACTED DURING PREPARATION OF THE INITIAL STUDY

- Allen, Neil, Principal Civil Engineer, Sacramento Regional County Sanitation District #1, August 24, 2004,
- Christensen, Peter, Planner, Sacramento Metropolitan Air Quality Management District, September 30, 2004.
- Johnson, Scott, Assistant Planner, City of Sacramento Environmental <u>Planning Development</u> Services Department. August 5, 2004a.
- Johnson, Scott, Assistant Planner, City of Sacramento Environmental <u>Development Planning</u> Services Department. September 23, 2004b.
- Ferguson, Joyce, Senior Designer, Development Services Sacramento Regional County Sanitation District #1. September 16, 2004.
- Haenggi, Teresa, Planner, City of Sacramento Department of Parks and Recreation; Parks Planning, Design, and Development Division, August 18, 2004.
- McCray, Kurt, Crime Prevention Specialist, Sacramento Police Department, August 16, 2004.
- Phillips, Dean, Facilities Planning Technician, Natomas Unified School District, Facilities and Planning Division, August 16, 2004.
- Morgan, Matt, Engineer, County of Sacramento, County Sanitation District 1, July 26, 2004.
- Root, Michael, Program Analyst, City of Sacramento Public Works Solid Waste Division, August 18, 2004.
- Schamber, David Supervising Engineer Department of Utilities. August 10, 2004.
- Morris Helen, Dispatcher, City of Sacramento Police Department, August 13, 2004.
- Wackford, Barbra, Consultant, City of Sacramento, Department of Parks and Recreation, Parks Planning, Design, and Development Division, August 19, 2004.
- Wilborn, Amy, Dispatcher, City of Sacramento Fire Department, August 19, 2004.

## PERSONS PREPARING THE INITIAL STUDY

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Eileen Shaw, Senior Planner

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Katherine Duncanson, Associate Planner, URBEMIS 2002 Air Quality Analysis

Erin Gottschalk, Resource Associate, Biological Resources

## **TECHNICAL STUDIES**

- Certified Arborist Assessment for the ±75-acre River Oaks Park Project, City of Sacramento, Sacramento County, California. North Fork Associates, September 27, 2004.
- Cultural Resources Inventory of the River Oaks Park Project, PAR Environmental Services, Inc. Sacramento, California, February 2004.
- Biological Resource Assessment for the ±75-acre River Oaks Park Project, North Fork Associates, August 27, 2003.
- Biological Resource Assessment for the River Oaks Park Pedestrian Bridge Alignment, , North Fork Associates,
- Biological Resource Assessment for the Expansion of West El Camino Avenue, City of Sacramento, Sacramento County, California, September 22, 2004.
- Environmental Noise Assessment River Oaks Project, City of Sacramento, California, Bollard and Brennan Inc., October 2004.
- Environmental Site Assessment River Oaks Park, Wallace Kuhl & Associates Inc, August 7, 2003.
- Traffic Study, Dowling and Associates, September 2004
- URBEMIS 2002 Air Quality Modeling, North Fork Associates, September 2004.
- Wetland Delineation for the ±75-acre River Oaks Park Project, North Fork Associates, August 20, 2003.
- Wetland Delineation Verification Letter, U.S. Army Corps of Engineers, February 18, 2004.

# RIVER OAKS PARK INITIAL STUDY

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