

**PROMENADE AT NATOMAS
RECIRCULATED DRAFT
ENVIRONMENTAL IMPACT
REPORT**

(SCH# 2000072035)

Prepared for:

City of Sacramento
Sacramento, California

Prepared by:

EIP Associates
Sacramento, California

December 2003

**PROMENADE AT NATOMAS RECIRCULATED
DRAFT ENVIRONMENTAL IMPACT REPORT**

Prepared for:

City of Sacramento
Sacramento, California

Prepared by:

EIP Associates
Sacramento, California

December 2003

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

TABLE OF CONTENTS

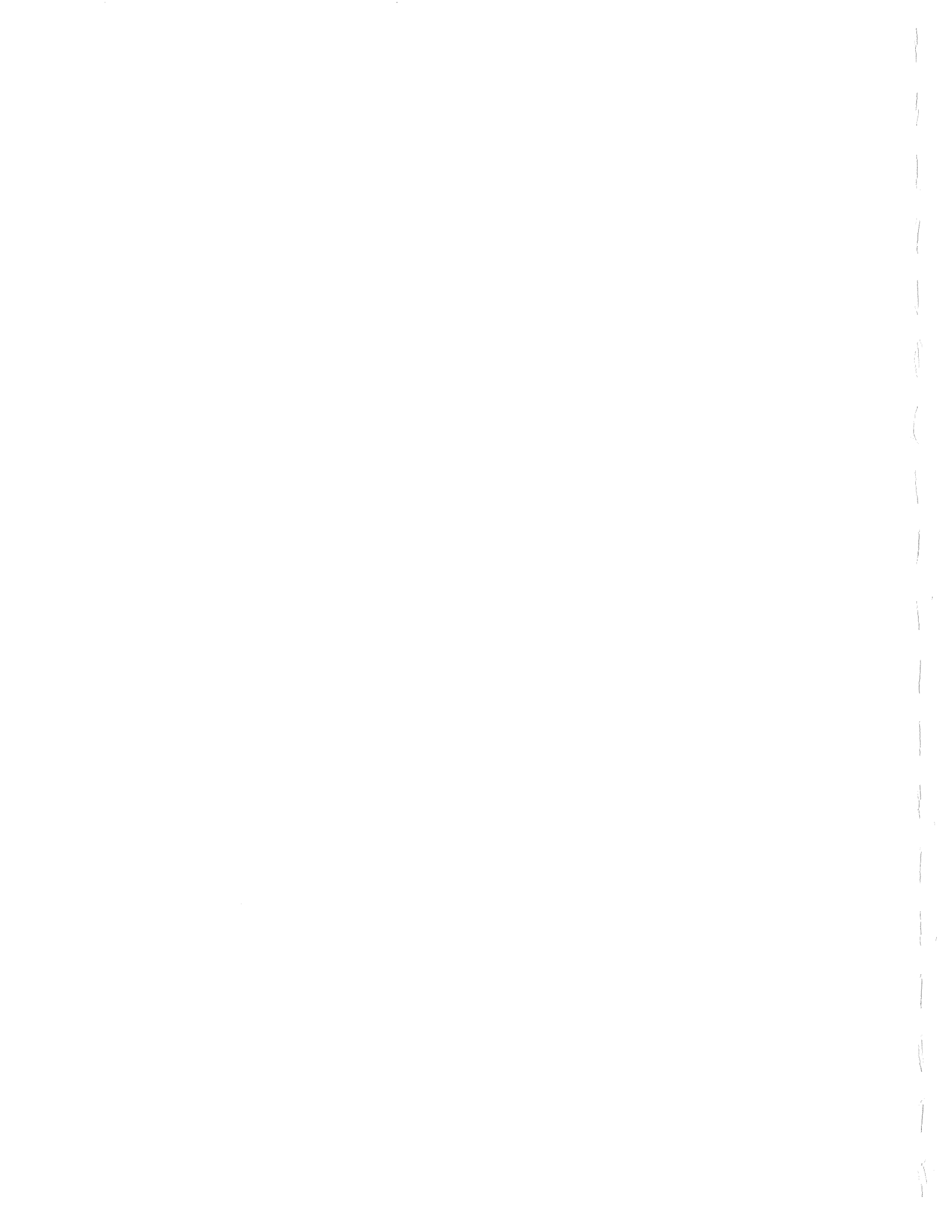


TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
1. INTRODUCTION.....	1-1
2. SUMMARY.....	2-1
3. PROJECT DESCRIPTION.....	3-1
4. PROJECT ALTERNATIVES.....	4-1
5. LAND USE, PLANNING AND SOCIO-ECONOMIC EFFECTS.....	5-1
5.1 Land Use and Planning.....	5.1-1
5.2 Socio-economic Effects.....	5.2-1
6. POPULATION, EMPLOYMENT AND HOUSING.....	6-1
7. ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES	
7.1 Introduction to the Analysis.....	7.1-1
7.2 Transportation and Circulation.....	7.2-1
7.3 Air Quality.....	7.3-1
7.4 Noise.....	7.4-1
7.5 Public Services and Utilities.....	7.5-1
7.6 Public Health/Hazards.....	7.6-1
7.7 Hydrology and Water Quality.....	7.7-1
7.8 Biological Resources.....	7.8-1
7.9 Cultural Resources.....	7.9-1
8. CEQA CONSIDERATIONS.....	8-1
9. EIR AUTHORS AND PERSONS CONTACTED.....	9-1
10. LIST OF ACRONYMS AND ABBREVIATIONS.....	10-1
11. BIBLIOGRAPHY.....	11-1

APPENDICES

Appendix 1: Existing and Proposed General Plan, Zoning, Community Plan, and Special Permit Graphics

APPENDICES CONTAINED IN VOLUME II AND III OF THE PROMENADE AT NATOMAS/ SACRAMENTO AUTO LOOP DEIR ARE AVAILABLE FOR REVIEW AT THE CITY OF SACRAMENTO PLANNING DEPARTMENT, 1231 I STREET, ROOM 300, SACRAMENTO, CA 95814

LIST OF TABLES

<u>Table</u>	<u>Page</u>
2-1 Proposed Project Land Use Plan.....	2-2
2-2 Project Alternatives Proposed Land Uses.....	2-5
2-3 Summary of Impacts and Mitigation Measures.....	2-7
3-1 Proposed Land Use Plan	3-6
4-1 Alternative 1 Baseline I-80 Mainline Operations	4-5
4-2 Alternative 1 Baseline I-80 Interchange Operations	4-6
4-3 Alternative 2 Baseline I-80 Mainline Operations	4-6
4-4 Alternative 2 Baseline Levels of Service.....	4-11
4-5 Alternative 2 Baseline I-80 Mainline Operations	4-12
4-6 Alternative 2 Baseline I-80 Interchange Operations	4-12
4-7 Construction Emissions for the Community Plan Buildout Alternative.....	4-14
4-8 Operational Emissions for the Community Plan Buildout Alternative.....	4-14
4-9 Predicted Traffic Noise Levels for the Community Plan Buildout Alternative	4-16
4-10 Community Plan Buildout Alternative Water Demand.....	4-18
4-11 Community Plan Buildout Alternative Wastewater Demand	4-19
4-12 Alternative 3 Baseline Levels of Service.....	4-25
4-13 Alternative 3 Baseline I-80 Mainline Operations	4-26
4-14 Alternative 3 Baseline I-80 Interchange Operations	4-26
4-15 Construction Emissions for the Retail/Mixed Use Alternative.....	4-28
4-16 Operational Emissions for the Retail/Mixed Use Alternative.....	4-28
4-17 Predicted Traffic Noise Levels for the Retail/Mixed Use Alternative	4-30
4-18 Retail/Mixed Use Alternative Water Demand.....	4-32
4-19 Retail/Mixed Use Alternative Wastewater Demand	4-33
4-20 Construction Emissions for the Off-Site Alternative.....	4-40
4-21 Operational Emissions for the Off-Site Alternative.....	4-41
4-22 Predicted Traffic Noise Levels for the Off-Site Alternative	4-42
4-23 Comparison of Alternatives to the Proposed Project	4-53
5.1-1 Project Site Land Uses	5.1-7
5.1-2 Project Site Zoning.....	5.1-7
6-1 Employment Generation for Project Site with Existing NNCP Land Use Designations	6-2
6-2 Projected Jobs-Housing Ratio at Buildout of the NNCP Area (Year 2016)	6-5
6-3 Proposed Land Uses and Development Potential of the Proposed Project.....	6-7
6-4 Jobs/Housing Balances for Proposed Project.....	6-8

7.2-1 Level of Service Criteria – Signalized Intersections.....7.2-15

7.2-2 Level of Service Criteria – Unsignalized Intersections.....7.2-16

7.2-3 Level of Service Criteria – Freeway Mainline.....7.2-16

7.2-4 Level of Service Criteria – Freeway Ramp Merge/Diverge Areas.....7.2-16

7.2-5 Level of Service Definitions – Freeway Ramps.....7.2-17

7.2-6 Existing Conditions – Intersection Levels of Service.....7.2-18

7.2-7 Existing I-80 Mainline Operations.....7.2-18

7.2-8 Existing I-80 Interchange Operations.....7.2-19

7.2-9 Trip Generation Comparison PPB per April 2003 DEIR and December 2003
Proposed Project.....7.2-22

7.2-10 Transit Ridership Proposed Project.....7.2-24

7.2-11 Proposed Project Baseline Levels of Service.....7.2-28

7.2-12 Proposed Project Baseline I-80 Mainline Operations.....7.2-31

7.2-13 Proposed Project Baseline I-80 Interchange Operations.....7.2-31

7.2-14 Parking Generation.....7.2-34

7.2-15 Lane Requirements on Affected Roadways.....7.2-35

7.2-16 Proposed Project Cumulative Levels of Service.....7.2-40

7.2-17 Cumulative Levels of Service – Proposed Project with and without
National Drive Extension.....7.2-42

7.2-18 Proposed Project Cumulative I-80 Mainline Operations.....7.2-47

7.2-19 Proposed Project Cumulative I-80 Interchange Operations.....7.2-47

7.3-1 Ambient Air Quality Standards.....7.3-3

7.3-2 Summary of Carbon Monoxide, Ozone, and PM₁₀ Monitoring Data.....7.3-6

7.3-3 2000 Emission Inventory for Sacramento County (Tons per Day).....7.3-8

7.3-4 Trip Generation Rates for the Proposed Project.....7.3-13

7.3-5 Construction Emissions for the Proposed Project.....7.3-15

7.3-6 Operational Emissions for the Proposed Project.....7.3-17

7.3-7 Microscale Carbon Monoxide Concentrations.....7.3-18

7.4-1 Acoustical Terminology.....7.4-2

7.4-2 Ambient Noise Monitoring Results Project Vicinity March 30, 2001.....7.4-3

7.4-3 Baseline Weekday Traffic Volumes, Noise Levels, and Distances to Contours
Promenade at Natomas – Sacramento, California.....7.4-6

7.4-4 Baseline Saturday Traffic Volumes, Noise Levels, and Distances to Contours
Promenade at Natomas – Sacramento, California.....7.4-8

7.4-5 Sacramento City Noise Ordinance Standards Applicable at Exterior Spaces of
Residential Uses.....7.4-10

7.4-6 Proposed Project Predicted Traffic Noise Levels.....7.4-11

7.4-7 Construction Equipment Noise.....7.4-12

7.5-1 Water Demand Rates.....7.5-11

7.5-2 Proposed Project Water Demand.....7.5-11

7.5-3 Proposed Project Wastewater Demand.....7.5-17

7.5-4 Proposed Project Energy Demand.....7.5-20

7.5-5 Solid Waste Demand Rates.....7.5-23

7.5-6 Proposed Project Solid Waste Demand.....7.5-25

7.6-1 Analytical Results of Soil Samples.....7.6-2

7.7-1 Summary of Detention Basin Stage-Storage Relationship.....7.7-11

7.7-2 Detention Basin Operations During Storm Events7.7-11

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
3-1 Project Location.....	3-3
3-2 Site Plan Parcelization Plan	3-5
4-1 Alternative 2 Community Plan Buildout.....	4-9
4-2 Alternative 3 Retail/Mixed Use.....	4-23
4-3 Alternative 4 Off-Site Alternative	4-37
7.2-1 Project Location.....	7.2-3
7.2-2 Existing Lanes and Traffic Control.....	7.2-5
7.2-3 Baseline No-Project Lanes and Traffic Control.....	7.2-6
7.2-4 Baseline Plus Project Lanes and Traffic Control	7.2-7
7.2-5 Cumulative Plus Project Lanes and Traffic Control.....	7.2-8
7.2-6 Existing AM Peak Hour Traffic	7.2-10
7.2-7 Existing PM Peak Hour Traffic.....	7.2-11
7.2-8 Existing Saturday Peak Hour Traffic.....	7.2-12
7.2-9 Existing Average Daily Traffic	7.2-13
7.2-10 Probable Future Projects	7.2-38
7.2-11 Daily Traffic Volumes 2025	7.2-39
7.4-1 Noise Reading Locations.....	7.4-4
7.7-1 Location of Proposed Detention Basins	7.7-10
7.8-1 Proposed Project Site Habitat Communities.....	7.8-2



1. INTRODUCTION

1.0 INTRODUCTION

INTRODUCTION

This recirculated Draft Environmental Impact Report (RDEIR) is prepared at the request of the City of Sacramento in response to changed conditions relating to the development of the Natomas Promenade project (formerly the Promenade at Natomas/Sacramento Auto Loop project). As permitted by the California Environmental Quality Act (CEQA), Guidelines section 15088.5, this DEIR is a "recirculated DEIR". The Promenade at Natomas/Sacramento Auto Loop project DEIR was completed on April 4, 2003, and circulated for a 45-day public review period concluding on May 19, 2003.

The City of Sacramento, as Lead Agency, has chosen to re-circulate the Promenade at Natomas/Sacramento Auto Loop DEIR for further public review due to changes made to the project. Specifically, the project applicant has removed Development Scenario A: Sacramento Auto Loop as a potential development option for the project site. The new project is a retail development similar to Development Scenario B: Retail Project. However, the new retail development proposed is less intense than Scenario B evaluated in the DEIR. In addition, the name of the project has changed from the Promenade at Natomas/Sacramento Auto Loop project to the Promenade at Natomas project (Proposed Project).

PROJECT BACKGROUND

In 2000, the Opus West Corporation (project applicant) submitted an application to the City of Sacramento for entitlements for development of approximately 126.4 acres of the Proposed Project site as a regional retail center (retail project). In July 2000, the City prepared and circulated a Notice of Preparation (NOP) for the proposed retail project to solicit feedback from responsible and trustee agencies and the general public on issues to be addressed in the EIR. In April 2001, the City held a public meeting on the proposed retail project to receive input from the community on concerns with regard to potential environmental impacts (copy of the NOP and responses are included as Appendix A in the Promenade at Natomas/Sacramento Auto Loop DEIR Volume II Appendices). Comments received included a desire to see a project alternative that addressed development of an automall on the project site. Subsequently, the project applicant submitted a revised application to the City and proposed different land uses and site design. The proposed land use designations and acreage distribution was modified to create a project that included an automall and was consistent with existing North Natomas Community Plan (NNCP) designations. The revised project analyzed both a proposed automall (Scenario A) and a retail project (Scenario B) and was renamed the Promenade at Natomas/Sacramento Auto Loop project.

A revised NOP was released for the Promenade at Natomas/Sacramento Auto Loop project on September 4, 2002 for a 30-day public comment period ending on October 4, 2002. A second public scoping meeting was held on September 25, 2002. A copy of the revised NOP and the

second public comment period comments are included in this EIR in Appendix C. Appendix B in the Promenade at Natomas/Sacramento Auto Loop DEIR Volume II Appendices includes the Initial Study that was prepared.

The Promenade at Natomas/Sacramento Auto Loop DEIR was released for public review in early April 2003. During this time the project applicant submitted another revised development application to the City to eliminate the proposed automall development scenario in lieu of a retail project that is less intense than the retail project (Scenario B) analyzed in the Promenade at Natomas/Sacramento Auto Loop DEIR. For the purpose of the analysis contained in this RDEIR, it is assumed that because the project includes a less intense development than that evaluated for Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR, impacts associated with the Proposed Project would be less severe. Therefore, unless noted, the RDEIR assumes the same impacts and mitigation measures as those identified for Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR.

The following is a summary of changes made to Scenario B: Retail Project.

- The total amount of development has been reduced 257,500 square feet (sf) from 1,512,500 sf to 1,255,000 sf.
- The total number of parking spaces has decreased from 7,034 to 5,596, a reduction of 1,438 spaces.
- The amount of land developed has decreased from 109.4 acres to 104.8 acres.
- The revised project does not attempt to change the existing Employment Center land use designation on the southwest portion of the site adjacent to Gateway Park Boulevard and Truxel Road. The original project located office uses to the northeast portion of the site (requiring a Community Plan Land Use Amendment), while the revised project (Proposed Project) locates office uses within the existing Employment Center designated land, ensuring improved access to the proposed light rail transit route.
- The larger floor-plate retail uses (over 100,000 square feet) have been shifted to the north and east portions of the site, medium sized floor-plate retail uses (below 30,000 square feet) have been placed along Interstate 80 at the southeastern portion of the site, a pedestrian oriented retail village has been placed in the center of the site, and office uses have been placed at the southwestern portion of the site, closer to Truxel Road.

SCOPE OF THIS RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT

This is an RDEIR. It has been prepared in conformance with the CEQA (as amended) to evaluate the environmental impacts associated with the proposed Promenade at Natomas project. The project applicant is seeking a general plan amendment, community plan amendment, rezone, establishment of a Planned Unit Development (PUD), adoption of PUD guidelines, schematic plan, tentative subdivision map(s), phased special permit, and a Development Agreement between the City and OPUS West Corporation regarding development of this project. Please see Chapter 3, Project Description, for more specific project information.

CEQA requires the preparation of an EIR when there is substantial evidence that a project could have a significant effect on the environment. The purpose of an EIR is to provide decision makers, public agencies, and the general public with an objective and informational document that fully discloses the potential environmental effects of the Proposed Project. The EIR process is specifically designed to describe the objective evaluation of potentially significant direct, indirect, and cumulative impacts of the Proposed Project; to identify alternatives that reduce or eliminate the project's significant effects; and to identify feasible measures that mitigate significant effects of the project. In addition, CEQA requires that an EIR identify those adverse impacts determined to remain significant after mitigation.

The City of Sacramento is the lead agency under CEQA for the preparation of this RDEIR. According to section 15088.5(4)(d) of the CEQA Guidelines, a recirculated EIR requires a notice of availability be prepared the same as an EIR.

Comments on the NOPs released for the Promenade at Natomas /Sacramento Auto Loop EIR (July 2000 and September 2002) expressed concerns regarding:

- Increases in traffic;
- Vehicle emissions;
- Noise impact mitigation; and
- Water quality.

These issues have not changed from the analysis included in the Promenade at Natomas/Sacramento Auto Loop project DEIR. As mentioned previously, the DEIR for the Promenade at Natomas/Sacramento Auto Loop project was circulated for public review from April 4, 2003 through May 19, 2003. For the purpose of the analysis contained in this RDEIR, it is assumed that because the project includes a less intense development than that evaluated for Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR, impacts associated with the Proposed Project would be less severe. Therefore, unless noted, the RDEIR assumes the same impacts and mitigation measures as those identified for Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR.

This RDEIR is being circulated for public review and comment for a period of 50 days from December 15, 2003 through February 2, 2004, to accommodate the upcoming holidays. During this period, comments on the RDEIR's accuracy and completeness may be submitted to the lead agency from the general public, as well as organizations and agencies.

Upon completion of the public review period, a Final EIR (FEIR) will be prepared that will include both written and oral comments on the RDEIR received during the public review period and responses to those comments. The FEIR will address any revisions to the RDEIR made in response to public comments. The RDEIR and FEIR will comprise the EIR for the Proposed Project.

Before the lead agency can approve the project, the agency must certify that the EIR has been completed in compliance with CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the lead agency.

PROJECT APPROVAL

The Proposed Project is subject to the approval of the City of Sacramento City Council. Project approval would also entail adoption of Findings of Fact and a Statement of Overriding Considerations by the City Council. The City Council must take formal action on all the entitlements listed below with the exception of the tentative map and special permit. Unless appealed, the Planning Commission shall take final action regarding the tentative map and special permit.

REQUIRED DISCRETIONARY ACTIONS

The discretionary actions necessary for project approval include, but are not limited to, the following:

Lead Agency

Certification of the EIR

Certification that the EIR adequately identifies the significant environmental effects of the Proposed Project, pursuant to the State CEQA Guidelines, and the City of Sacramento CEQA Guidelines.

Discretionary Entitlements

In order to develop the Proposed Project, the entitlements requested include the following:

- Development Agreement between the City and OPUS West Corporation regarding development of this site;
- City of Sacramento General Plan Amendment to change 30.8± acres designated for Mixed Commercial uses and 95.6± acres designated for Heavy Commercial or Warehouse uses to 30.8± acres designated for Mixed Use and 95.6± acres designated for Regional Commercial and Office;
- NNCP Amendment to change 30.27± acres designated for Employment Center-50 and 91.25± acres designated for Light Industrial uses and 4.88± acres of roadways to 26.02± acres designated for Employment Center 50, 78.4± acres designated for Regional Retail and 10.9± acres designated for parks/open space, and 11.08± acres of roadways;
- Re-zone 126.4± gross acres of land zoned A-PUD to 28.12± acres zoned Employment Center 50 Planned Unit Development (EC-50-PUD) and 87.38± acres zoned Shopping Center Planned Unit Development (SC-PUD), and 10.9± acres zoned for drainage (A-OS-PUD);
- Planned Unit Development Establishment with associated PUD Guidelines and PUD Schematic Plan;
- Tentative Subdivision map; and
- Special Permit for retail uses.

LEAD AND RESPONSIBLE AGENCIES

The City of Sacramento is the lead agency for preparation of The Promenade at Natomas environmental analysis. In conformance with sections 15050 and 15367 of the State CEQA Guidelines, the City of Sacramento has been designated the “lead agency” which is defined as the “public agency which has the principal responsibility for carrying out or disapproving a project.”

Lead Agency Contact

City of Sacramento Planning and Building Department:

Grace Hovey, Associate Planner
Environmental Planning Services
1231 I Street, Suite 300
Sacramento, California 95814
(916) 264 –7601

No Responsible Agency, which is defined as a public agency other than the lead agency that has discretionary approval over the project, has been identified.

USE OF THIS EIR

This EIR is a “Project EIR,” pursuant to section 15161 of the CEQA Guidelines. A Project EIR examines the environmental impacts of a specific project. This type of EIR focuses on the changes in the environment that would result from implementation of the project, including construction and operation.

How to Use this Report

This report includes six principal parts; Summary, Project Description, Environmental Analysis (Setting, Impacts, and Mitigation Measures), Alternatives Analysis, and CEQA Considerations.

The **Summary** (Chapter 2) presents an overview of the results and conclusions of the environmental evaluation. This section identifies impacts of the Proposed Project and available mitigation measures.

The **Project Description** (Chapter 3) describes the location of the project, project background, existing conditions on the project site, and the nature and location of specific elements of the Proposed Project that are proposed for construction.

The **Project Alternatives** (Chapter 4) includes a description of the project alternatives with a discussion of each environmental issue. An EIR is required by CEQA, to provide adequate information for decision makers to make a reasonable choice between alternatives based on the environmental aspects of the Proposed Project and alternatives. This chapter also identifies the environmentally superior alternative.

conditions and system design. Therefore, in the absence of a Preliminary Drainage Master Plan specific to this alternative site to ensure that on- or off-site flooding would not occur, this impact is considered to be potentially significant.

However, because the Offsite Alternative, was not considered in the Proposed Project's Preliminary Drainage Master Plan, development could increase the potential for on- and off-site flooding, and could exceed the capacity of existing drainage systems. The following mitigation measure would reduce the impact to a less-than-significant level through preparation of a Preliminary Drainage Master Plan in accordance with stormwater requirements set forth by the City of West Sacramento. However, if this alternative were selected the City of Sacramento cannot guarantee that compliance with this mitigation measure would occur because it is under the jurisdiction of the City of West Sacramento. Therefore, the impact would remain significant and unavoidable.

Mitigation Measure

A Preliminary Drainage Master Plan for the Reed Avenue site shall be prepared in accordance with the stormwater drainage requirements of the City of West Sacramento. The drainage plan shall ensure that project runoff does not exceed existing or planned capacity of West Sacramento Drainage Facilities or RD 537 facilities.

Under the Offsite Alternative, site construction would be subject to the same federal and State water quality protection requirements as the Proposed Project. The City of West Sacramento is in the process of developing its NPDES Phase 2 stormwater quality program, which must be in place by March 2003. The requirements established in the program for BMPs would apply to this alternative. Because development of this alternative would be required to protect water quality through the relevant provisions of the construction and operation required NPDES permits, this impact is considered to be less than significant.

Biological Resources

A drainage canal is located along the southern boundary of the Offsite Alternative project site. The same as the Proposed Project, this drainage canal may be subject to the jurisdiction of the Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. If the drainage canals fall under the jurisdiction of the Corps, any project activities that result in discharge or placement of fill material into these canals would require a wetland delineation and permit under Section 404 of the Clean Water Act.

At this time it is not known if a roadway would need to be located across the drainage canal; however, if a roadway would be required it is assumed the city of West Sacramento would comply with required federal and State requirements. Compliance with Mitigation Measure 7.8-1 would reduce the impact to a less-than-significant level, the same as the Proposed Project.

There are several mature trees that are growing along the southern boundary of the project site for Alternative 4 that may meet the City of West Sacramento's definition of a street tree or heritage tree. Implementation of the Offsite Alternative could impact trees through removal or trimming, and/or grading and excavation near the tree's root systems. Any work performed near street trees or heritage trees would be conducted in accordance with the City's tree ordinance. This is considered a significant impact.

and socio-economic issues are described in Sections 5.1 and 5.2, respectively. Population, employment and housing issues are described in Chapter 6,

Issues focused out of this EIR that were identified as being less than significant in the Initial Study include:

- Agricultural Resources;
- Mineral Resources;
- Aesthetics; and
- Geology and Soils.

For a complete discussion of technical issues focused out of this EIR, please see the Initial Study in Appendix B in the Promenade at Natomas/Sacramento Auto Loop project DEIR Volume II Appendices.

2. SUMMARY



2.0 SUMMARY

INTRODUCTION

This RDEIR has been prepared in conformance with CEQA (as amended) to evaluate the environmental impacts associated with the Proposed Project.

This RDEIR examines the environmental impacts of the whole of the project, including all aspects and phases of the project. This EIR will be considered by the City of Sacramento and responsible agencies in their decision-making process and by interested parties as a public information source, as well as a vehicle to communicate with officials and decision-makers regarding the Proposed Project. This EIR is a "Project EIR," pursuant to section 15161 of the CEQA Guidelines.

This summary chapter is intended to highlight major areas of importance in the environmental analysis for decision-makers and the public and provides the information described in CEQA Guidelines section 15123. The summary includes a brief synopsis of the Proposed Project and project alternatives, areas of known controversy, and issues to be resolved. A summary of the potential environmental impacts that could occur as result of the Proposed Project, their level of significance, mitigation measures, and level of significance after mitigation are also included in this chapter.

SUMMARY OF PROJECT DESCRIPTION

The project applicant is seeking a general plan amendment, community plan amendment, rezone, adoption of PUD guidelines, schematic plan, tentative subdivision map(s), phased special permit, and a Development Agreement between the City and OPUS West Corporation regarding development of this project.

The Promenade at Natomas

The project site is divided into three areas or zones. Area 1 comprises the western portion of the site and contains approximately 30.8 acres. Of this acreage, approximately 4.8 acres is designated for a drainage easement, roadways and the required 100-foot freeway setback. This leaves approximately 26.02 acres available for development in Area 1. Area 2 is located in the central portion of the site and contains approximately 12.8 acres. Area 3 is located in the northern portion of the site and the southeastern portion and contains approximately 82.8 acres. Of this acreage, approximately 17.2 acres is designated for roadways and a drainage easement/detention basin. Table 2-1 provides a breakdown of land uses and acreage amounts.

The project site is designated for Heavy Commercial or Warehouse and Mixed Use under the City's General Plan and Light Industrial and Employment Center 50 (EC-50) under the North Natomas

TABLE 2-1				
PROPOSED PROJECT LAND USE PLAN				
Land Use Designation	Proposed Zoning	Developable Acreage (approximate)	Proposed maximum floor Development	Parking Spaces
Area 1 (West Parcel)				
Employment Center	EC-50-PUD	26.02±	504,000	1,593
Drainage Easement/Setback requirement 100 ft.	A-OS-PUD	2.68±	N/A	N/A
Roadways	EC-50-PUD	2.1±	N/A	N/A
Area 2 (Central Parcel)				
Regional Commercial	SC-PUD ¹	12.8±	77,000	522
Area 3 (Northern and Southern Parcels)				
Regional Commercial	SC-PUD ¹	65.6±	674,000	3,481
Drainage Easement/Detention Basin(s)	A-OS-PUD	8.22±	N/A	N/A
Roadways	SC-PUD	8.98±	N/A	N/A
Total Acreage/sf/spaces		126.4	1,255,000	5,596
Source: Opus West Corporation, October 24, 2003.				
Notes:				
1 The SC-PUD zoning district will allow regional commercial and retail uses to be developed.				

Community Plan (NNCP). The site is zoned A-PUD.^{1,2} The project applicant is seeking to amend the City's General Plan by redesignating the site from Heavy Commercial or Warehouse and Mixed Use to Regional Commercial, Office and Mixed Use. In addition, the project calls for amending the NNCP from Light Industrial to Regional Commercial. The applicant is also seeking to rezone the site from A-PUD to EC-50 PUD³ and SC-PUD.

PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

An EIR analyzes the environmental effects of a Proposed Project, indicates ways to reduce or avoid potential environmental damage resulting from the project, and identifies alternatives to the proposed action. An EIR must also disclose significant environmental effects that cannot be avoided; growth-inducing effects; effects found not to be significant; and significant cumulative impacts of the Proposed Project. The purpose of an EIR is not to recommend either approval or denial of the project, but to provide information to aid in the decision-making process.

- 1 The purpose of the planned unit development is to encourage flexibility in the development of land in order to promote its most appropriate use; to improve the design, character and quality of new developments; to encourage a harmonious and appropriate mixture of uses; to facilitate the adequate and economic provision of streets, utilities and city services; to preserve critical natural environmental and scenic features of the site; to encourage and provide a mechanism for arranging improvements and sites so as to preserve desirable features; and to mitigate the problems which may be resented by specific site conditions.
- 2 A--Agricultural Zone. This is an agricultural zone 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. See Chapter 17.48 of this title for more details.
- 3 SC--Shopping Center Zone. This is a general shopping center zone which provides a wide range of goods and services to the community. This zone, however, prohibits general commercial uses which are not compatible with a retail shopping center.

SUMMARY OF CONTROVERSIAL ISSUES

As discussed previously in Chapter 1, the City issued a Notice of Preparation (NOP) on July 10, 2000. In addition, a public scoping meeting on the project and EIR process was held on April 4, 2001 to describe the project to members of the community and explain the City's approach to preparing the EIR. Written responses to the NOP and comments presented at the scoping meeting indicated a number of key areas of concern and potential controversy related to the prior Proposed Project. The key issues raised included:

- Traffic impacts to the I-80/Truxel Road interchange;
- Cumulative traffic impacts;
- Impacts to bus and future light rail transit;
- Consistency with the North Natomas Community Plan operations;
- Compatibility with land uses in the vicinity;
- Secondary socio-economic impacts; and
- Existing sewer capacity.

This list reflects the issues that appear to be the issues of key concern to local community, interest groups and agencies. Additional comments were received and documented and all comments received were considered in the preparation of both the Promenade at Natomas/Sacramento Auto Loop DEIR and the RDEIR. Please see Appendix A for a copy of the July 10, 2000 NOP and comments received in response to both the NOP and public scoping meeting.

Based on comments received on the first NOP, which included a desire to see a project alternative that addressed development of an auto mall on the project site, the project applicant submitted a revised application to the City and proposed different land uses and site design. The proposed land use designations and acreage distribution has changed to create a project consistent with the NNCP designations. The revised project was renamed the Promenade at Natomas/Sacramento Auto Loop.

To address these changes, a revised NOP was released on September 4, 2002 for a 30-day public comment period ending on October 4, 2002. A second public meeting was held on September 25, 2002. A copy of the revised NOP and the second public comment period comments are included in this EIR as Appendix C. The key issues raised in letters received on the NOP include:

- Traffic impacts, including impacts from test drives;
- Additional surface runoff;
- Economic effects of auto mall use;
- Lighting impacts;
- Effect of Light Rail transit station, including pedestrian access to station, including access to station resources;
- Impacts on cultural and archaeological resources; and
- Existing sewer capacity.

As discussed previously, the Promenade at Natomas/Sacramento Auto Loop DEIR was released for public review in April 2003. During this time the project applicant decided to revise the project once again to eliminate the auto mall project and to focus instead on a retail project. The project

applicant scaled back the original retail project analyzed in the Promenade at Natomas/Sacramento Auto Loop DEIR (Scenario B) to create a land use plan that is more responsive to the NNCP and the needs of the community. This revised retail project is the subject of this RDEIR.

ALTERNATIVES TO THE PROPOSED PROJECT

A number of alternatives that could potentially meet the project objectives were considered as a part of the environmental review for the project. Characteristics of each of the following alternatives and an analysis of potential environmental effects are presented in Chapter 4 (Project Alternatives) of this EIR. The following alternatives were evaluated:

Alternative 1, the No Project/No Development Alternative – This alternative assumes the Proposed Project will not be developed. The project site would remain agricultural land and would not be developed in the future.

Alternative 2, the Community Plan Buildout Alternative - Under Alternative 2, the project site could be developed in the future for light industrial uses, consistent with the existing land use and zoning designations under the NNCP. This alternative proposes approximately 399,000 sf of office uses (1,330 employees) and 1,550,000 sf of warehouse uses with 1,550 employees. Respective portions of the site currently designated A-PUD would require rezoning to EC-50 PUD and M-15 PUD, consistent with the existing Community Plan designation of EC-50, and Light Industrial.

Alternative 3, the Retail/Mixed Use Alternative – This alternative proposes retail, office, and warehouse/light manufacturing uses. Areas 1 and 2 would be zoned as SC-PUD in order to be utilized as retail space. Area 3 would be zoned M1/EC, which could be used as light manufacturing, office and retail.

Alternative 4, the Offsite - Reed Avenue Alternative – Alternative 4 is a 92-acre site located in West Sacramento east of Interstate 80 (I-80). The site is bounded by I-80 to the west, Harbor Boulevard to the east, and Reed Avenue to the north. Uses on the site include approximately 750,000 sf of retail uses, 762,500 sf of office uses, and a parking garage.

Table 2-2 shows the Proposed Project Alternatives and their respective land uses.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6(e) of the CEQA Guidelines requires that an environmentally superior alternative be designated and that “if the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” As discussed in Section 4, Project Alternatives, the No Project Alternative would be environmentally superior to the Proposed Project and Alternatives 2, 3 and 4. However, CEQA requires that, if the No Project Alternative is selected as the environmentally superior alternative, another alternative be selected. Therefore, Alternative 2 is the environmentally superior alternative because the impacts are essentially the same as the Proposed Project but in some instances less severe.

TABLE 2-2			
PROJECT ALTERNATIVES PROPOSED LAND USES			
Land Use Designation Proposed Project	Proposed Zoning	Developable Acreage (Agriculture)	Proposed Maximum Population
Regional Commercial	SC-PUD	78.4	751,000
Employment Center	EC-50-PUD	26.02	504,000
Drainage Easement/Setback requirement	A-OS-PUD	10.9	N/A
Roadways	SC-PUD/EC-50-PUD	11.08	N/A
Total Acreage/square footage		126.4	1,255,000
Employee Center-50	EC-50	30	0
Light Industrial	M-1(S) PUD	96.4	0
Total Acreage/square footage		126.4	0
Employee Center-50	EC-50	30	399,000
Light Industrial/Warehouse	M-1(S) PUD	96.4	1,550,000
Total Acreage/square footage		126.4	1,949,000
Commercial/Retail	SC-PUD	72	807,000
Office	M-1(S)-PUD	38	660,000
Total Acreage/Maximum Developable square footage		110	1,363,000¹
Office	N/A	N/A	750,000
Commercial/Retail	N/A	N/A	762,500
Total Acreage/square footage		92	1,512,000

Notes: 1. The total square footage differs from the maximum allowable square footage for this alternative.
Source: Opus West Corporation, September, 2002, EIP Associates, December 2002.

SUMMARY TABLE

This summary provides an overview of the analysis contained in Chapter 7, Environmental Setting, Impacts, and Mitigation Measures. The summary includes: discussions of effects found to be less than significant; significant impacts; unavoidable significant impacts; and mitigation measures to avoid or reduce identified significant impacts and unavoidable significant impacts.

Information in Table 2-3 (Summary of Environmental Impacts and Mitigation Measures) has been organized to correspond with environmental issues discussed in Chapter 7. The summary table, which is located at the end of this chapter, is arranged in four columns:

1. environmental impacts;
2. level of significance without mitigation;
3. mitigation measures required to reduce the level of impact; and
4. the level of significance after implementation of mitigation measures.

A series of mitigation measures are noted where more than one mitigation measure may be required to reduce the impact to a less-than-significant level.

The following initials are used to identify the project and project alternatives:

- Alternative 1 = No Project/No Development
- Alternative 2 = Community Plan Buildout
- Alternative 3 = Retail/Mixed Use
- Alternative 4 = Offsite-Reed Avenue

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Significance After Mitigation	Mitigation
<p>7.2-1 Intersections.</p> <p>The prior Retail Project development scenario (PPB) would provide no automall use and would provide approximately 740,000 sf of regional retail uses and 772,500 sf of office/retail uses. Intersection operating conditions associated with the baseline plus Proposed Project scenario are summarized in Table 7.2-11. Although the revised Proposed Project is smaller, the EIR analysis assumes the larger project would be developed. This development scenario would cause <i>significant impacts</i> at the following intersections:</p> <ul style="list-style-type: none"> Northgate Boulevard/Del Paso Road – traffic associated with the Proposed Project would degrade the level of service at the intersection of Northgate Boulevard and Del Paso Road from LOS C to LOS D during the a.m. peak hour. The intersection would operate at LOS F during the p.m. peak hour, with an average delay increase of 15 seconds due to the project. This is considered a <i>significant impact</i>. Arena Boulevard (North Market Boulevard)/Gateway Park Boulevard - traffic associated with the Proposed Project would degrade the level of service at the intersection of Arena Boulevard from LOS C to LOS D during the p.m. peak hour. This is considered a <i>significant impact</i>. North Market Boulevard/North Freeway Boulevard - traffic associated with the Proposed Project would degrade the level of service at the intersection of N. Market Boulevard from North Freeway Boulevard from LOS B to LOS F during the p.m. peak hour. This is considered a <i>significant impact</i>. Truxel Road/Gateway Park Boulevard - traffic associated with the Proposed Project would degrade the level of service at the intersection from LOS B to LOS F during the a.m. peak hour, from LOS C to LOS D during the p.m. peak hour, and from LOS C to LOS D during the Saturday peak hour. This is considered a <i>significant impact</i>. 	<p>7.2-1 Intersections.</p> <p>(a) Northgate Boulevard /Del Paso Road (#3)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C during peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>A traffic signal shall be installed with protected left turn signal phasing for eastbound and westbound approaches and split signal phasing for the northbound and southbound approaches. An overlap traffic signal phasing shall be provided to allow northbound Northgate Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound Del Paso Road left turning movement, and prohibit U-turns for the westbound left turning movement.</i></p> <p>(b) Arena Boulevard (North Market Boulevard)/ Gateway Park Boulevard (#5)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C during peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>Overlap traffic signal phasing shall be provided to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement.</i></p>	<p>S</p>	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<ul style="list-style-type: none"> ▪ Truxel Road/San Juan Road – traffic associated with the Proposed Project would degrade the level of service at the intersection from LOS E to LOS F, during the a.m. peak hour. During the p.m. peak hour, the intersection would operate at LOS D. This is considered a <i>significant impact</i>. ▪ North Market Boulevard/Northgate Boulevard – traffic at this intersection would not result in a significant impact. The impact would be considered <i>less than significant</i>. ▪ Gateway Park Boulevard/North Freeway Boulevard – this new intersection would operate at LOS E during the Saturday peak hour if constructed as shown in Figure 7.2-5. This is considered a <i>significant impact</i>. ▪ North Freeway Boulevard/West Project Access – This intersection will be designed to operate in accordance with City standards. 		<p>(c) North Market Boulevard/North Freeway Boulevard (#8)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>A traffic signal with protected left turn signal phasing shall be installed for the westbound North Market Boulevard approach. Overlap traffic signal phasing shall be provided to allow northbound North Freeway Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement.</i></p>	
		<p>(d) Truxel Road/Gateway Park Boulevard (#11)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>The four-lane approach to the intersection from the Natomas Marketplace shall be converted to provide a left-turn lane, a combination left-through lane, and two right turn lanes. An overlap traffic signal phasing shall be provided to allow right turning traffic to proceed on a green arrow simultaneously with the northbound Truxel Road left turning movement, and prohibit U-turns for the northbound left turn movement; and</i></p>	

S = Significant PS = Potentially Significant IS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Potential Impact	Potential Significance Prior to Mitigation	Mitigation Measure(s)	Potential Significance After Mitigation
		<p>The five-lane approach to the intersection from Gateway Park Boulevard shall be converted to provide three left turn lanes, a through lane, and a right turn lane; and</p> <p>An overlap traffic signal phasing shall be provided to allow northbound Truxel Road right turning traffic to proceed on a green arrow simultaneously with the southbound Gateway Park Boulevard left turning movement, and prohibit U-turns for the southbound left turn movement; and</p> <p>Split phasing for the northbound Natomas Marketplace approach and the southbound Gateway Park Boulevard approach shall be provided.</p> <p>(e) Truxel Road/San Juan Road (#17)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C during peak conditions. However, because it may not be feasible to add lanes at this location, the impact would be considered significant and unavoidable.</p> <p>A right turn lane shall be added to the westbound San Juan Road approach to provide two left turn lanes and two right turn lanes and provide overlap traffic signal phasing to allow westbound San Juan Road right turning traffic to proceed on a green arrow simultaneously with the southbound Truxel Road left turning movement, and prohibit U-turns for the southbound left turning movement. However, it may not be feasible to add lanes in this location; and</p> <p>An overlap traffic signal phasing shall be provided to allow northbound Truxel Road right turning traffic to proceed on a green arrow simultaneously with the westbound San Juan Road left turning movement, and prohibit U-turns for the westbound left turning movement.</p>	

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.2-2 Freeways.</p> <p>The following discussion of freeway operations addresses only the impacts identified as significant according to the significance criteria identified earlier in this section. Other portions of the freeway would fail to satisfy Caltrans standards with or without the project and would not be identified as significant impacts.</p> <p>Development of the Proposed Project would increase traffic volumes on the freeway system. I-80 mainline operating conditions associated with the baseline plus project scenario are included in Tables 7.2-12 and 7.2-13.</p> <p>Westbound I-80 would operate at LOS F west of Northgate Boulevard during the a.m. peak hour with or without the Proposed Project and for all the project alternatives. Likewise, the I-80 westbound Northgate Boulevard off-ramps would operate at LOS F during the a.m. peak hour. None of these freeway operational problems would be significant impacts of the project because the condition would exist without the project.</p>	S	<p>(f) Gateway Park Boulevard/North Freeway Boulevard (#19)</p> <p>This mitigation measure would improve the level of service from LOS E or worse to LOS C during Saturday peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>A left turn lane shall be added to the southbound Gateway Park Boulevard approach to provide two left turn lanes and two through lanes; and</i></p> <p><i>An overlap traffic signal phasing shall be provided to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Freeway Boulevard left turning movement, and prohibit U-turns for the westbound left turn movement.</i></p>	SU

S = Significant PS = Potentially Significant IS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Significance After Mitigation Measure(s)	Significance After Mitigation
<p>In addition, during the p.m. peak hour, both the northbound and southbound Northgate Boulevard ramps onto eastbound I-80 would operate at LOS F, but the downstream freeway would also operate at LOS F, so there would be no significant impacts at the ramps. A significant impact at a freeway ramp would occur if project traffic would cause the ramp's merge/diverge level of service to be worse than the freeway's level of service.</p> <p>Freeway off-ramp queues would be contained without extending into the ramp's deceleration area or onto the freeway for the Proposed Project and all alternatives. Expected queues are shown in the traffic study supplemental document that contains the level of service calculations.</p> <p>The following discussion addresses significant impacts of the Proposed.</p> <p>The Proposed Project development scenario would cause significant impacts at freeway locations. The project would cause the southbound Truxel Road merge onto westbound I-80 to operate at LOS E during the p.m. peak hour when the freeway would operate at LOS C. This is considered a significant impact.</p>	S	<p>7.2-3 Bikeways. <i>A Class I bike trail or Class II bike lane shall be provided through the Proposed Project site in accordance with the Sacramento Bikeway Master Plan.</i></p>	LS
<p>7.2-4 Pedestrian Circulation. Development of the project would result in the addition of employees, visitors, and shopping patrons to the project site. Sidewalks would be required along all new roadway construction in the project vicinity in conformance with City design standards. Although they are not shown on the preliminary site plans for the Proposed Project, it is anticipated that direct pedestrian corridors will be provided between project activity centers and the proposed future LRT transit stop along Truxel Road.</p> <p>The project is not anticipated to result in unsafe conditions for pedestrians, including unsafe bicycle/pedestrian or pedestrian/motor vehicle conflicts. Therefore, with regard to pedestrian circulation, there would be a less-than-significant impact.</p>	LS	<p>7.2-4 Pedestrian Circulation. None required.</p>	LS

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.2-5 Parking. Development of the Proposed Project would increase the demand for parking. The parking demand and proposed parking supply for the Proposed Project are shown in Table 7.2-14. The Proposed Project would provide enough parking on site in accordance with City Code to accommodate the typical parking demand. Since the Proposed Project must comply with City Code, <i>no impact</i> is identified.</p>	NI	<p>7.2-5 Parking. None required.</p>	NA
<p>7.2-6 Transit Ridership. Regional Transit Routes 13 and 14 currently serve the project site with a total of four buses during the a.m. peak hour and two during the p.m. peak hour. The buses on these routes have a capacity of 40 passengers per vehicle for a total capacity of 160 passengers during the a.m. peak hour and 80 passengers during the p.m. peak hour. The peak direction of patronage along these routes during the weekday commute is toward the Arden/Del Paso Light Rail Station (toward downtown Sacramento) during the a.m. peak hour and away from downtown during the p.m. peak hour. The demand for transit service to the project site would be in the reverse direction of the peak commuter demand. The prior retail project was projected to generate 83 transit riders during the a.m. peak, and 195 during the p.m. peak hour. The p.m. peak hour demand for transit services would exceed the capacity of the transit system. Therefore, this would be a <i>significant impact</i>. The total ridership (on a weekly basis) for the Proposed Project would be approximately three times the ridership for the current zoning. The Proposed Project would generate about 27 fewer riders than the current zoning during the a.m. peak hour, but would increase ridership during the p.m. peak hour by 36 riders. Saturday ridership would increase by 225 transit riders.</p>	S	<p>7.2-6 Transit Ridership. <i>Funding shall be provided to RT to expand bus transit service sufficient to accommodate the traffic demand at the site.</i></p>	LS

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Relative to Mitigation	Mitigation Measures	Significance After Mitigation
<p>7.2-7 Traffic Circulation and Safety. Several roadway design aspects were evaluated with regard to traffic circulation and safety. The number of lanes, access control, and centerline radius required on the primary roadways serving the site were evaluated according to the City of Sacramento Street Design Guidelines (Revised December 2001) (see Appendix D). A summary of the standard number of lanes for roadways affected by the Proposed Project is provided in Table 7.2-15.</p>	S	<p>7.2-7 Traffic Circulation and Safety. (a) Required number of lanes The mitigation measures described below regarding the number of lanes to mitigate the impact regarding the number of lanes to less-than-significant levels. <i>Six through lanes shall be provided on Gateway Park Boulevard from Truxel Road to North Freeway Boulevard or Main Project driveway. Driveways shall be prohibited on Truxel Road and Gateway Park Boulevard from Truxel Road to North Freeway Boulevard.</i></p> <p>(b) Centerline radii A roadway design that satisfies the Caltrans standard for comfortable speed on horizontal curves and is acceptable to the City of Sacramento Public Works Department would mitigate this impact to less than significant levels. <i>A design that satisfies Caltrans requirements for horizontal curves described in the Highway Design Manual (Figure 203.2) for the six-lane section of Gateway Park Boulevard shall be provided. A combination of centerline radius modifications (standard is 1,500 feet), superelevation (0.06 maximum is standard per Caltrans Design Manual Table 202.2), and/or speed limit restrictions (55 mph is City standard for six-lane streets in North Natomas serving up to 36,000 vehicles daily). A roadway with 1,000-foot centerline radius and 0.08 superelevation would provide a 55 mph design speed. A 0.04 superelevation could be provided if the design speed were reduced to 50 mph and a 1,000-foot radius were used.</i></p>	LS
<p>Based on the daily traffic volumes, the Sacramento Street Design Guidelines identify a need for six through lanes on Gateway Park Boulevard from Truxel Road to North Freeway Boulevard and on North Freeway Boulevard from Gateway Park Boulevard to the Main Project driveway. The site plans show four lane roadways in these sections.</p> <p>No driveway access would be allowed along Truxel Road (an eight-lane roadway), nor would driveway access be allowed along Gateway Park Boulevard between Truxel Road and North Freeway Boulevard, a distance of approximately 850 feet, due to the requirement for 500-foot driveway spacing on six-lane roadways. These access restrictions are necessary to prevent potentially hazardous weaving movements across multiple lanes of heavily traveled streets.</p> <p>The centerline radius on Gateway Park Boulevard between Truxel Road and North Freeway Boulevard is approximately 1000 feet. The standard radius for this section of six-lane roadway is 1500 feet (based on the Sacramento Street Design Guidelines).</p> <p>The internal roadway configuration has changed under the Proposed Project; however, the internal roadways will be designed to City standards. This would ensure impacts associated with internal roadways and driveway placement would be less than significant.</p> <p>The design elements discussed above could result in substandard levels of safety and would constitute a <i>significant impact</i>.</p>	S		

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.2-8 Intersections. (Cumulative) The Proposed Project would increase traffic volumes at study area intersections. Intersection operating conditions associated with the cumulative scenario are summarized in Table 7.2-16. Significant impacts would occur at the following intersections:</p> <ul style="list-style-type: none"> ▪ Del Paso Road/National Drive – the intersection would operate at LOS E during the p.m. peak hour without the Proposed Project, and the Proposed Project would increase the average delay by 15 seconds. This is considered a significant impact. ▪ Northgate Boulevard/Del Paso Road – the intersection would operate at LOS F during the a.m., p.m., and Saturday peak hour under existing conditions. Without the Proposed Project the Del Paso Road/National Drive intersection would operate at LOS E during the p.m. peak hour. Under the project the average delay would increase by 15 seconds. This is considered a significant impact. <p>Increase the average delay at the intersection by 18 seconds during the a.m. and p.m. peak hours, by 8 seconds during Saturday peak hour. This is considered a significant impact.</p>	<p>S</p>	<p>7.2-8 Intersections. (Cumulative) (a) Del Paso Road/National Drive (#2) Three through lanes shall be provided in each direction on Del Paso Road in conformance with the North Natomas Community Plan¹; and Two lanes shall be added to the northbound National Drive approach to provide two left turn lanes, two through lanes, and one right turn lane; and One lane shall be added to the southbound National Drive approach to provide two left turn lanes, one through lane, and one combination through-right turn lane.</p>	<p>LS</p>

1 The entire section of Del Paso Road will need to be widened to six lanes within the study area (from Gateway Park Boulevard to Northgate Boulevard) to provide acceptable traffic operations for cumulative conditions.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significant Mitigation	Mitigation Measures
<ul style="list-style-type: none"> North Market Boulevard/National Drive - the intersection would operate at LOS F during the a.m. peak hour without the Proposed Project, and the project would increase the average delay by 16 seconds. This is considered a <i>significant impact</i>. North Market Boulevard/North Freeway Boulevard - traffic would degrade the level of service at the intersection from LOS B to LOS D during the p.m. peak hour. This is considered a <i>significant impact</i>. North Market Boulevard/Northgate Boulevard - the intersection would operate at LOS F during the a.m. peak hour without the project, and with the project would increase the average delay by 34 seconds. The intersection would operate at LOS E during the p.m. peak hour without the project, and with the project would increase the average delay by 15 seconds. This is considered a <i>significant impact</i>. Truxel Road/Gateway Park Boulevard - traffic from the project would degrade the level of service at the intersection from LOS C to LOS F during the a.m. peak hour. The intersection would operate at LOS F during the p.m. and Saturday peak hour without the project; the project would essentially double the average delay at the intersection during these time periods. This is considered a <i>significant impact</i>. Truxel Road/I-80 West Ramps - traffic from the project would degrade the level of service at the intersection from LOS C to LOS E during the Saturday peak hour. This is considered a <i>significant impact</i>. Truxel Road/I-80 East Ramps - traffic from the project would degrade the level of service at the intersection from LOS D to LOS E during the p.m. peak hour. This is considered a <i>significant impact</i>. 	<p>Level of Significant Mitigation</p>	<p>(b) Del Paso Road/Northgate Boulevard (#3)</p> <p>This mitigation measure would improve the level of service from LOS F to LOS C during peak conditions. The impact after mitigation would be less than significant.</p> <p>A traffic signal shall be installed with protected left turn signal phasing for eastbound and westbound approaches and split signal phasing for the northbound and southbound approaches; and</p> <p>For the eastbound Del Paso Road approach, the following shall be provided: one left turn lane, three through lanes, and one right turn lane with overlap signal phasing to allow eastbound Del Paso Road right turning traffic to proceed on a green arrow simultaneously with the northbound Northgate Boulevard left turning movement, and prohibit U-turns for the northbound left turning movement; and</p> <p>For the westbound Del Paso Road approach, the following shall be provided: two left turn lanes, two through lanes, and a combination through-right turn lane; and</p> <p>For the northbound Northgate Boulevard approach, the following shall be provided: two left turn lanes, a combination left-through lane, and two right turn lanes with overlap traffic signal phasing to allow northbound Northgate Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound Del Paso Road left turning movement, and prohibit U-turns for the westbound left turning movement.</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<ul style="list-style-type: none"> ▪ Truxel Road/San Juan Road – the intersection would operate at LOS F during the a.m. peak hour without the project, and with the project would increase the average delay by 38 seconds. During the p.m. and Saturday peak hours, the intersection would operate at LOS D, and with the project would increase the average delay by 10 seconds and 12 seconds, respectively. This is considered a <i>significant impact</i>. ▪ Gateway Park Boulevard/North Freeway Boulevard – traffic from the project would degrade the level of service at the intersection from LOS C to LOS D during the p.m. and Saturday peak hours. This is considered a <i>significant impact</i>. ▪ Arena Boulevard/Gateway Park Boulevard (additional significant <i>impact</i> because the Proposed Project would degrade the level of service at the intersection from LOS C to LOS D during the Saturday peak hour) ▪ Northgate Boulevard/I-80 East Ramps (additional <i>significant impact</i> because the intersection would operate at LOS F during the p.m. peak hour without the project, and with the project would increase the average delay by 16 seconds) ▪ Northgate Boulevard/San Juan Road (<i>less-than-significant impact</i>) 		<p>(c) Arena Boulevard (North Market Boulevard)/Gateway Park Boulevard (#5)</p> <p><i>An overlap traffic signal phasing shall be provided to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement. This mitigation measure would improve the level of service from LOS D to LOS C during peak Saturday conditions. The impact after mitigation would be less than significant.</i></p> <p>(d) North Market Boulevard/National Drive (#7)</p> <p>This mitigation measure would improve the level of service from LOS F to LOS D during weekday peak conditions. The impact after mitigation would be less than significant.</p> <p>Two lanes shall be added to the northbound National Drive approach to provide one left turn lane, one through lane, and one right turn lane with overlap phasing to allow northbound National Drive right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement; and</p> <p>Two lanes shall be added to the southbound National Drive approach to provide one left turn lane, one through lane, and one right turn lane with overlap phasing to allow southbound National Drive right turning traffic to proceed on a green arrow simultaneously with the eastbound North Market Boulevard left turning movement, and prohibit U-turns for the eastbound left turning movement; and</p> <p>Two lanes shall be added to the eastbound North Market Boulevard approach to provide two left turn lanes, one through lane, and one combination through-right turn lane; and</p> <p>One lane shall be added to the westbound North Market Boulevard approach to provide one left turn lane, one through lane, and one combination through-right turn lane.</p>	

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACT	Level of Significance Without Mitigation	Level of Significance With Mitigation
		<p>(e) North Market Boulevard North Freeway Boulevard (#8)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>A traffic signal shall be installed with protected left turn signal phasing for the westbound North Market Boulevard approach, provide overlap traffic signal phasing to allow northbound North Freeway Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement.</i></p> <p>(f) North Market Boulevard/Northgate Boulevard (#9)</p> <p>This mitigation measure would not improve the level of service in comparison to the level of service without the project. The mitigation measure would reduce delay at the intersection during congested periods below the delay that would occur without the project. However, because it may not be feasible to add lanes in this location, the impact of the project after mitigation would be <i>significant and unavoidable</i>.</p> <p><i>One lane shall be added to the southbound Northgate Boulevard approach to provide one left turn, two through lanes, and one combination through-right turn lane. However, it may not be feasible to add lanes at this location and</i></p> <p><i>The right-turn channelizing island shall be removed and two lanes added to the eastbound North Market Boulevard approach to provide a left turn lane, a combination through-right turn lane, and two right turn lanes; and</i></p> <p><i>The two westbound North Market Boulevard approach lanes shall be provided and provide one left turn lane and one combination through-right turn lane; and</i></p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Level of Significance After Mitigation
		<p><i>A protected left-turn phasing for all intersection approaches shall be provided, and</i></p> <p><i>An overlap traffic signal phasing shall be provided to allow eastbound North Market Boulevard right turning traffic to proceed on a green arrow simultaneously with the northbound Northgate Boulevard left turning movement, and prohibit U-turns for the northbound left turning movement.</i></p> <p>(g) Truxel Road/Gateway Park Boulevard (#11)</p> <p>Delays at this intersection would be higher after mitigation than with no project and no mitigation. Therefore, this impact would remain <i>significant and unavoidable.</i></p> <p><i>Implement Mitigation Measure 7.2-1 (e).</i></p> <p>(h) Truxel Road/I-80 West Ramps (#13)</p> <p>No feasible mitigation measures were identified; therefore, this impact would remain <i>significant and unavoidable.</i></p> <p>(i) Truxel Road/I-80 East Ramps (#14)</p> <p>This mitigation measure would improve the level of service from LOS E or worse to LOS C during p.m. peak hour conditions. The impact after mitigation would be <i>less than significant.</i></p> <p><i>The existing lanes for southbound Truxel Road shall be modified to provide two through lanes and two right turn lanes. This modification would require the approval of Caltrans.</i></p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Level of Significance Without Mitigation	Level of Significance With Mitigation	Impact
<p>(g) Northgate Boulevard/I-80 East Ramps (#16)</p> <p>No feasible mitigation measures were identified for this intersection. If the Northgate <i>Boulevard</i> bridge structure across I-80 were widened to add one lane to the southbound Northgate Boulevard approach, resulting in one through lane, one combination through-right turn lane, and one right turn lane, the level of service would be improved from LOS F to LOS E during p.m. peak hour conditions – better than the LOS F conditions that would occur without the project. This modification would not be feasible; therefore, the impact would be <i>significant and unavoidable</i>.</p>	<p>(k) Truxel Road/San Juan Road (#17)</p> <p>This mitigation measure would improve the level of service from LOS F to LOS D during the a.m. peak hour— better than the LOS F that would result without the project. The mitigation measure would improve the level of service from LOS E to LOS D during the p.m. peak hour – resulting in lower delay than would result without the project. During the Saturday peak hour, the mitigation measure would improve the level of service from LOS D or worse to LOS C. Therefore, the impact after mitigation would be <i>less-than-significant</i>.</p> <p><i>Implement Mitigation Measure 7.2-1 (f); and</i></p> <p><i>An overlap traffic signal phasing shall be provided to allow eastbound San Juan Road right turning traffic to proceed on a green arrow simultaneously with the northbound Truxel Road left turning movement, and prohibit U-turns for the northbound left turning movement.</i></p>	<p>(l) Gateway Park Boulevard / North Freeway Boulevard (#19)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be <i>less than significant</i>.</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.2-9 Freeways. (Cumulative)</p> <p>The Proposed Project development scenario would increase traffic volumes on the freeway system. I-80 mainline operating conditions associated with the cumulative scenario are summarized in Tables 7.2-18 and 7.2-19, and cause the following <i>significant impacts</i> on I-80:</p> <ul style="list-style-type: none"> ▪ Traffic would cause the freeway level of service to deteriorate from LOS E to LOS F on the I-80 mainline east of Northgate Boulevard during the Saturday peak hour. ▪ Traffic would cause the westbound I-80 diverge at the Northgate Boulevard interchange to operate at LOS F during the p.m. peak hour when the freeway would operate at LOS E (without the project, the diverge would operate at LOS D and the freeway would operate at LOS E). 	<p>S</p>	<p><i>Two lanes shall be added to the northbound Gateway Park Boulevard approach to provide two left turn lanes, two through lanes, and two right turn lanes with overlap phasing to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Freeway Boulevard left turning movement, and prohibit U-turns for the westbound left turn movement; and</i></p> <p><i>Two lanes to the southbound Gateway Park Boulevard approach shall be added to provide two left turn lanes, two through lanes, and one right turn lane; and</i></p> <p><i>An overlap traffic signal phasing shall be provided to allow right turning traffic from the Natomas Village Center to proceed on a green arrow simultaneously with the northbound Gateway Park Boulevard left turning movement, and prohibit U-turns for the northbound left turn movement.</i></p>	<p>SU</p>
<p>7.2-9 Freeways. (Cumulative)</p> <p>For eastbound I-80 east of Northgate Boulevard, it might be possible to mitigate impacts associated with the Proposed Project for this section of I-80; however, there are several constraints that make mitigation infeasible. A discussion of the potential mitigation and constraints that make mitigation infeasible are provided under the discussion of baseline conditions. In summary, adding lanes to I-80 would require widening the bridge across the Natomas East Main Drainage Canal and the Union Pacific Railroad tracks. Widening the freeway east of the bridge may require additional right-of-way or expensive construction methods to avoid right-of-way acquisition. The potential mitigation measure is considered infeasible; therefore, this impact would remain <i>significant and unavoidable</i>. For westbound I-80 at the Northgate Boulevard Off-Ramp, it might be possible to mitigate impacts associated with the project for the off-ramp; however, similar constraints to those listed above make mitigation infeasible. The potential mitigation would require providing a two lane exit ramp by adding an auxiliary lane 1300 feet in advance of the interchange ramp as required by Caltrans design standards. This mitigation measure would improve p.m. peak hour ramp operations to LOS D or better, but would also require widening the bridge across the Natomas East Main Drainage Canal and the Union Pacific Railroad tracks. Widening the freeway east of the bridge may require</p>	<p>S</p>	<p><i>Two lanes shall be added to the northbound Gateway Park Boulevard approach to provide two left turn lanes, two through lanes, and two right turn lanes with overlap phasing to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Freeway Boulevard left turning movement, and prohibit U-turns for the westbound left turn movement; and</i></p> <p><i>Two lanes to the southbound Gateway Park Boulevard approach shall be added to provide two left turn lanes, two through lanes, and one right turn lane; and</i></p> <p><i>An overlap traffic signal phasing shall be provided to allow right turning traffic from the Natomas Village Center to proceed on a green arrow simultaneously with the northbound Gateway Park Boulevard left turning movement, and prohibit U-turns for the northbound left turn movement.</i></p>	<p>SU</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.2-10 Transit Ridership. (Cumulative)</p> <p>A light rail transit (LRT) extension, the Downtown-Natomas-Airport (DNA), is planned along Truxel Road with construction expected to commence in 2010. The North Natomas Composite Plan Transportation Evaluation (Kirtleson & Associates, Inc. 1992) indicates that LRT would capture four percent of the trips that terminate within ¼ mile of a transit station, and three percent of the trips outside that limit. That assumption would indicate that LRT would serve about 540 weekday trips for current zoning – about 70 percent of the total weekday transit trips.</p> <p>The Proposed Project development scenario would serve about 780 new weekday riders. The planned LRT system will be designed with a capacity to serve development according to the current zoning. During the peak hour of operation, the project would generate about 25 more LRT riders than current zoning – the equivalent of about one-half additional LRT car during the p.m. peak hour. This would be a <i>significant impact</i>.</p>	S	<p>7.2-10 Transit Ridership. (Cumulative)</p> <p>Funding shall be provided to expand LRT operations to accommodate the additional project demand for transit services.</p>	LS
<p>7.3-1 Construction-related PM₁₀ emissions. (Project-specific)</p> <p>Under the Proposed Project, approximately 6.19 µg/m³ of PM₁₀ would be generated on any given day. This assumes that a maximum of 15 acres per day are graded. The estimated PM₁₀ emissions would not exceed SMAQMD's threshold of 30 µg/m³; therefore, this impact would be <i>less than significant</i>.</p>	LS	<p>7.3-1 Construction-related PM₁₀ emissions. (Project-specific)</p> <p>None required.</p>	NA
<p>7.3-2 Construction-related ozone precursor emissions. (Project-specific)</p> <p>As shown in Table 7.3-5, under the Proposed Project, 45.48 lbs/day of ROG, 565.58 lbs/day of NO_x, and 12.33 lbs/day of CO would be generated by construction equipment. Under the Proposed Project, NO_x emissions would exceed the district's adopted thresholds of 85 lbs/day, resulting in a <i>significant impact</i>.</p>	S	<p>7.3-2 Construction-related ozone precursor emissions. (Project-specific)</p> <p>To reduce NO_x emissions associated with construction activities, the prime contractor shall provide a plan for approval by the City of Sacramento and SMAQMD demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction project, and operated by either the prime contractor or any subcontractor, shall achieve a fleet-averaged 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average; and</p>	SU

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Level of Significance After Mitigation
		<p><i>The prime contractor shall submit to the City of Sacramento and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used on aggregate of 40 or more hours during the construction project. The inventory shall include the horsepower rating, engine production year, and 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 30-day period in which no construction activity occurs.</i></p> <p><i>The prime contractor shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and 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 monthly summaries 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 30-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 mitigation measure shall supersede other SMAQMD or state rules or regulations.</i></p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Level of Significance After Mitigation
<p>7.3-3 Project operational emissions. (Project-specific) As indicated in Table 7.3-5, operational emissions associated with the Proposed Project are estimated to be approximately 375 lbs/day of ROG, 393 lbs/day of NO_x, 3,274 lbs/day of CO, and 131 lbs/day 3.36 µg/m³ of PM₁₀. Under the Proposed Project, ROG and NO_x emissions would exceed SMAQMD's thresholds of 65 lbs/day, resulting in a <i>significant</i> impact.</p>	<p>S</p>	<p>7.3-3 Project operational emissions. (Project-specific) Prior to project construction, the project applicant and city shall consult with the SMAQMD to ensure all applicable and feasible mitigation measures are being implemented, which shall include the following:</p> <ul style="list-style-type: none"> a) <i>Bicycle lockers and/or bike racks shall be provided at all office buildings and retail centers.</i> b) <i>Provide an additional 20 percent of required Class I and Class II bicycle parking facilities.</i> c) <i>A display case or kiosk displaying transportation information in a prominent area accessible to employees and patrons.</i> d) <i>Parking lot shade shall be increased by 20 percent over city code requirements.</i> e) <i>Preferential parking for carpool/vanpools shall be provided to encourage shared ridership.</i> f) <i>The parking lot design shall include clearly marked and shaded pedestrian pathways between transit facilities and building entrances.</i> g) <i>The project applicant shall require building and/or property owners contracts with landscapers who operate equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use.</i> b) <i>For all office development, promote telecommuting and implement an employee telecommuting program.</i> i) <i>Implement Clean Air Business Practices such as using low-emission delivery vehicles, contracting with alternative fuel waste hauling companies, etc.</i> <p>SU</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.3-4 CO emissions. (Project-specific)</p> <p>As previously discussed, CO modeling was completed for the six worst intersections for the Proposed Project that were operating at an LOS F and which had the longest delays. All modeling was completed using information provided in the traffic analysis. As shown in Table 7.3-7, none of the intersections would result in a violation of the 1-hour or 8-hour standards for CO. It can be assumed that if the intersections with the most traffic congestion and longest delay times do not violate adopted CO standards, then those intersections that are operating at a similar level but with less traffic and shorter delay times also would not violate adopted CO standards. All CO modeling outputs are located in Appendix C. The highest CO level that is predicted to occur is 3.1 ppm for the 1-hour standard and 2.2 ppm for the 8-hour standard located 50 feet from the roadway at the intersection of Truxel Road and Gateway Park Boulevard. Because these levels are below the 20 ppm 1-hour standard and the 9 ppm 8-hour standard, a <i>less-than-significant impact</i> would occur.</p>	<p>LS</p>	<p>7.3-4 CO emissions. (Project-specific)</p> <p>None required.</p>	<p>NA</p>
<p>7.3-5 Criteria air pollutants. (Cumulative)</p> <p>As discussed in the project description, the Proposed Project would require a General Plan Amendment, Community Plan Amendment, and zoning changes to the existing site. Most notably, 101 acres of the site are currently designated for warehouses or similar uses, which produce considerably fewer air emissions because of the lower trip generation rate per 1,000 square feet. To accommodate the Proposed Project, the project site would be redesignated as commercial, office, and retail, all of which would result in more vehicle trips and higher emissions.</p> <p>Furthermore, as noted previously in the section, the project area is located within Sacramento County which is currently designated as non-attainment for both State and federal ozone standards. The primary cause of ozone formation in the region is due to mobile vehicles that generate the pollutants ROG and NO_x, both of which are ozone precursors.</p> <p>Assuming development within the Sacramento Valley Air Basin through the year 2025, development of the site would result in higher emissions than it would if it were built-out in accordance with existing General Plan, Community Plan, and zoning designations, and because the region is designated as severe non-attainment for ozone, the Proposed Project would contribute considerably to a <i>significant cumulative impact</i> to air quality.</p>	<p>S</p>	<p>7.3-5 Critical air pollutants. (Cumulative)</p> <p>Implement mitigation measures 7.3-1 through 7.3-3.</p>	<p>SU</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significant Priority Mitigation	Level of Significant Priority Mitigation	Level of Significant Priority Mitigation
<p>7.3-6 CO emissions. (Cumulative)</p> <p>As previously discussed, CO modeling was completed for the six worst intersections in the vicinity of the project site that were operating at an LOS F and which had the longest delays. All modeling was completed using information provided in the traffic analysis. As shown in Table 7.3-7, none of the intersections under cumulative conditions for the year 2025 would result in a violation of the 1-hour or 8-hour standards for CO. It can be safely assumed that if the intersections with the most traffic congestion and longest delay times do not violate the adopted CO standards, then those intersections that are operating at a similar level but with less traffic and shorter delay times also would not violate adopted CO standards. All CO modeling outputs are located in Appendix C. The highest cumulative CO level that is predicted to occur is 3.4 ppm for the 1-hour standard and 2.3 ppm for the 8-hour standard located 50 feet from the roadway at the intersection of Truxel Road and Gateway Park Boulevard. Because these levels are below the 20 ppm 1-hour standard and the 9 ppm 8-hour standard, the impact is not considered cumulatively considerable and a <i>less-than-significant impact</i> would occur.</p>	<p>LS</p>	<p>7.3-6 CO emissions. (Cumulative)</p> <p>None required.</p>	<p>NA</p>
<p>7.3-7 Toxic air contaminant concentrations. (Cumulative)</p> <p>As previously noted, the adopted health risk threshold for exposure to TAC is 10 in 1 million. This means that if a source results in more than 10 excess cancer cases per 1 million people, a significant impact may occur. The local air districts are responsible for regulating and monitoring TACs from stationary sources. Permits, and in some cases the implementation of Best Available Control Technology (BACT) or Maximum Available Control Technology (MACT), are required to ensure that stationary sources do not in and of themselves pose a significant risk to sensitive receptors. However, it is possible for stationary sources, that individually do not exceed the adopted risk threshold of 10 in 1 million to cumulatively exceed the adopted risk threshold of 10 in 1 million when numerous facilities are operated simultaneously. At the present time, there are no known stationary sources within the vicinity of the project site that emit TACs. Implementation of the Proposed Project is not anticipated to result in the construction of stationary sources that emit TACs. In the event any facilities are constructed, they would be required to comply with the rules and regulations of local air districts to ensure that the health risk of 10 in 1 million is not exceeded.</p>	<p>S</p>	<p>7.3-7 Toxic air contaminant concentrations. (Cumulative)</p> <p>The trucks used for delivering materials to the project site are not owned or operated by the project applicant, and therefore retro-fitting existing engines with diesel particulate filters, requiring the use of alternative fuels, and/or purchasing new trucks that meet the new, stricter diesel particulate matter emission standards are not feasible mitigation measures. Any mitigation to reduce the magnitude of this impact must be implemented by the CARB and would occur over time as stricter emissions requirements are adopted and implemented.</p> <p>Because there are no feasible mitigation measures available to reduce the magnitude of this impact, it would remain <i>significant and unavoidable</i>.</p>	<p>SU</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>In 1998 the CARB identified diesel particulate matter as a toxic air contaminant. Diesel particulate differs from other TACs in that it is generated primarily by mobile sources. The risk to sensitive receptors associated with exposure to this TAC depends upon a number of factors, including the wind direction, wind speed, concentration of the diesel particulate matter, the length of exposure, the existing concentration of diesel particulate matter in the air, and the distance from the source. The CARB currently estimates that the existing overall risk level associated with diesel particulate matter in California is estimated to be 540 excess cancer cases per 1 million people. Consequently, the existing risk level is higher than the adopted threshold of 10 in 1 million.</p> <p>With implementation of the Proposed Project, diesel powered trucks would be used to deliver and distribute material goods associated with development of the site. Diesel trucks would be used to deliver automobiles to the proposed automall. Similarly, diesel trucks would be used to transport goods to retail and commercial uses on the site. In addition to delivery trucks associated with the project and alternatives, both the project site and off site alternative are located adjacent to an existing freeway.</p> <p>Although there are no residential homes within the project site, people would work within the project site for an average of 8 hours per day and 5 days per week. In some cases the work schedule may be slightly less or more. During the time the employee is working within the project site or off site alternative, they would be exposed to TACs associated with the delivery trucks and existing freeway traffic.</p> <p>The CARB has produced a series of risk characterization scenarios as an Appendix to the <i>Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles</i>. The scenario that most closely resembles the Proposed Project is known as the "Low Volume Freeway". In this scenario, the freeway has three lanes in each direction and receptors were placed as close as 20 meters from the edge of the freeway. It was assumed that there was a flow of 2,000 trucks per day. Based on this scenario, the health risk was estimated to be 200 excess cancer cases per million people based on 70 years of exposure.² This estimated risk exceeds the threshold of 10 excess cancer cases per million people.</p>			

2 California Air Resources Board. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. Stationary Source Division, Mobile Source Control Division. October 2000, Appendix VII.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Prior to Mitigation	Significance After Mitigation Measures (S)	Significance After Mitigation
<p>While this low volume freeway scenario can be applied to the Proposed Project, it is important to note that there are differences between this scenario and the project site. Most notably, although the Interstate-80 freeway is located immediately adjacent to the project site, most likely setback requirements and the design of the project would result in a distance that is greater than 20 meters between sensitive receptors (employees) and the existing freeway.</p> <p>Traffic volumes along west bound I-80 that were recorded at the Northgate/I-80 intersection were estimated to be 126,000 vehicles per day. The number of vehicles estimated for the east bound lanes at the same intersection were estimated to be 104,000 vehicles per day.³</p> <p>The CARB has not produced a risk scenario analyzing the potential impacts associated with the exposure of diesel particulate matter for trucks making deliveries that would be comparable to operation of the Proposed Project. However, the CARB has produced a risk scenario for idling school buses, which would most closely resemble the risk associated with diesel trucks delivering products to the project site. In this scenario, the diesel particulate matter emissions from the loading and unloading of school children was quantified and the associated health risk was estimated. It was assumed that the buses were idling between 2 and 15 minutes while the children were loading and unloading. The risk associated with this scenario was estimated to be 90 excess cancer cases per million people based on 70 years of exposure. This estimated risk scenario also exceeds the threshold of 10 excess cancer cases per million people.</p> <p>Furthermore, it should be noted that the project site is located adjacent to an existing light industrial area. This area currently delivers and distributes goods via diesel trucks on a daily basis. The same is also true of the existing Natomas Market Place, which also receives deliveries from diesel powered trucks on a daily basis.</p> <p>Diesel particulate matter is a unique TAC in that it is generated by mobile sources, which are currently unregulated by local air districts. However, mobile source emissions, including diesel particulate matter are regulated by the CARB, a State entity. The CARB has derived a number of strategies for reducing diesel particulate matter. These strategies include retro-fitting existing engines by installing a diesel particulate filter, using alternative fuels, and stricter emission control standards for all new engines.</p>			

3 California Department of Transportation. www.dot.ca.gov/hg/traffops/safefirst/trafdata/1999, website accessed December 11, 2002.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>Although the risk scenarios presented here for comparison represent a worst-case scenario, since they assume an individual will receive continuous maximum exposure to the TAC for 70 years (the estimated lifetime of an individual), and although the Proposed Project's individual contribution to diesel particulate matter within the area would be minimal, development of the Proposed Project in combination with other development in the region could still expose employees to a substantial risk that is greater than the adopted 10 in 1 million threshold. Therefore, this would be a <i>significant cumulative impact</i>.</p>			
Noise			
<p>7.4-1 Construction Noise. (Project-specific) Activities associated with construction within the project area would result in elevated noise levels within the project area, with maximum noise levels as shown in Table 7.4-7. Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature and would occur during normal daytime working hours. Construction activities would be required to adhere to the requirements of the City of Sacramento Noise Ordinance with respect to hours of operation, muffling of internal combustion engines, and other factors that affect construction noise generation. The nearest sensitive receptors are new residences and are a distance away from the site to the northwest. Because there are no sensitive receptors in the immediate project vicinity that would be adversely affected by construction noise, this impact is considered <i>less than significant</i>.</p>	LS	<p>7.4-1 Construction Noise. (Project-specific) None required.</p>	NA
<p>7.4-2 Traffic Noise. (Project-specific) Under the Proposed Project, traffic noise level increases are predicted to be 4 dB or more on 7 roadway segments on weekdays and 13 roadway segments on weekends, as shown in Tables 7.4-6. Noise-sensitive land uses include new multi-family residential uses in the vicinity of Truxel and Arena. The Proposed Project includes a 5 dB increase on the east segment of the Truxel/Arena intersection on weekdays and a 12 dB and 9 dB increase on the east and west segments, respectively on weekends. Therefore, this is considered a <i>significant impact</i>.</p>	S	<p>7.4-2 Traffic Noise. (Project-specific) None available.</p>	SU

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.4-3 Commercial Loading Dock and Related Noise Levels. (Project-specific)</p> <p>The project site is not adjacent to existing or planned residential uses. Noise-producing aspects of commercial loading docks and associated commercial noise sources on the project site are predicted to produce noise levels of less than 35 dB Leq and 50 dB Lmax at the nearest land uses. Pursuant to the City's Noise Ordinance criteria shown in Table 7.4-4, noise associated with commercial loading docks exceeding 50 dB Leq and 70 dB Lmax would be considered significant during daytime hours. During nighttime hours, the City noise standards are 10 dB more restrictive. Because of the considerable distance between the on-site project-related noise sources and the nearest residential uses, noise generated by on-site noise sources are not predicted to exceed the City's Noise Ordinance standards. Therefore, this is considered a <i>less-than-significant impact</i>.</p>	LS	<p>7.4-3 Commercial Loading Dock and Related Noise Levels. (Project-specific)</p> <p>None required.</p>	NA
<p>7.4-4 Traffic Noise. (Cumulative)</p> <p>The Proposed Project would generate increased traffic on the existing roadway network. Under the Proposed Project, traffic noise level increases are predicted to be 4 dB or more on seven roadway segments on weekdays and nine roadway segments on weekends, as indicated by Table 7.4-6. As indicated in these tables, there would be a 5 dB increase on the east segment of the Truxel/Arena intersection during weekdays and weekends. Because there are noise-sensitive land uses in the vicinity of Truxel and Arena, this is considered a <i>significant impact</i>.</p>	S	<p>7.4-4 Traffic Noise. (Cumulative)</p> <p>None available.</p>	SU

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	7.5 Public Services and Utilities Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.5-1 Increased demand for police protection services. (Project-specific)</p> <p>The Proposed Project would result in an increase of approximately 4,184 employees, but would not result in a population increase in the North Natomas area. The Sacramento Police Department would provide service to the project from the North Station. No new officers would be necessary in order to maintain the NNCP's 1.6/1,000 officer-to-population ratio because there would be no increase in population. In addition, increases in call volume associated with the project would not significantly increase response times.⁴ This is considered a <i>less-than-significant impact</i>.</p>	LS	<p>7.5-1 Increased demand for police protection services. (Project-specific)</p> <p>None required.</p>	NA
<p>7.5-2 Increased demand for police protection services. (Cumulative)</p> <p>Development in the North Natomas area and its associated effects on law enforcement services were taken into account in the North Natomas Community Plan. Rapid development in the North Natomas area will require that police services be augmented in order to accommodate increasing demand from the area's growing population. The Proposed Project would not cause a population increase in the North Natomas area, and therefore would not significantly contribute to the need for additional police services in the area. This impact would be considered cumulatively <i>less than significant</i>.</p>	LS	<p>7.5-2 Increased demand for police protection services. (Cumulative)</p> <p>None required.</p>	NA
<p>7.5-3 Increased demand for fire protection services. (Project-specific)</p> <p>The Proposed Project would result in the generation of approximately 4,184 employees, but would not directly result in a population increase in the North Natomas area. The Sacramento Fire Department would provide service to the project primarily from Station 81.</p>	LS	<p>7.5-3 Increased demand for fire protection services. (Project-specific)</p> <p>None required.</p>	NA

4 Jim Hyde, City of Sacramento Police Department, personal communication, July 17, 2002.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>Although the Proposed Project would not create a new population that would result in the need for new fire protection staff or facilities, the Promenade at Natomas would result in large-scale development on a site that is currently undeveloped, and could result in a slightly higher emergency call volume in the event of fire or situations requiring EMT services. Response times could also be compromised by the addition of more emergency trips. However, it is not anticipated that the Proposed Project would create a substantial increase in demand for fire protection services that would compromise the current 5-minute response time or otherwise prevent the SFD from providing adequate service. This is considered a <i>less-than-significant impact</i>.</p>	LS		
<p>7.5-4 Increased demand for fire protection services. (Cumulative) Development in the North Natomas area and its associated effects on fire protection services were taken into account in the North Natomas Community Plan. Rapid development in the North Natomas area will require that fire protection services be augmented in order to accommodate increasing demand from the area's growing population. The Proposed Project would not cause a population increase in the North Natomas area, and therefore would not significantly contribute to the need for additional fire protection services in the area. This cumulative impact would be considered <i>less than significant</i>.</p>	LS	<p>7.5-4 Increased demand for fire protection services. (Cumulative) None required.</p>	NA
<p>7.5-5 Increased demand for potable water. (Project-specific) Table 7.5-2 shows the estimated water demand for the Proposed Project. As stated above under the Environmental Setting, the City of Sacramento currently has water rights for a total of 192,000 AFY from the Sacramento and American Rivers, and a maximum of 326,800 AFY from the Sacramento and American Rivers for the year 2030 and beyond. The Proposed Project would result in water demand of 341 AFY. With an average excess water supply of 54,250 AFY, the existing City of Sacramento water rights would be adequate to accommodate the Proposed Project. Therefore, this is considered a <i>less-than-significant impact</i> for the Proposed Project.</p>	LS	<p>7.5-5 Increased demand for potable water. (Project-specific) None required.</p>	NA

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.5-6 Increased demand for water treatment and/or infrastructure. (Project-specific)</p> <p>The Proposed Project would use a system of 12-inch lines that would tie into existing 12-inch lines located in the nearby public rights of way along Truxel Road and Gateway Park Boulevard.⁵ A 12-inch water main extension is required for the project in Gateway Park Blvd. from Truxel Road to the north property line of the project (approximately 1600 feet). This infrastructure would be adequate to handle the water demand created by the Proposed Project.</p> <p>Table 7.5-2 shows the estimated water demand of the Proposed Project. As stated above under the Environmental Setting, the Sacramento River Water Treatment Plant and the E.A. Fairbairn Water Treatment Plant have reliable capacities of 110 mgd and 90 mgd, respectively, for a total reliable water treatment capacity of 190 mgd. In addition, a 100-mgd expansion to the Fairbairn Water Treatment Plant and a 50-mgd expansion of the Sacramento River Treatment Plant are currently under construction.⁶ This water treatment infrastructure would be adequate to accommodate the Proposed Project. Therefore, this is considered a <i>less-than-significant impact</i> for the Proposed Project.</p>	<p>LS</p>	<p>7.3-3 Increased demand for water treatment and/or infrastructure. (Project-specific)</p> <p>None required.</p>	<p>NA</p>
<p>7.5-7 Increased demand for potable water. (Cumulative)</p> <p>The City of Sacramento currently has an average excess water supply of 54,250 AFY, available to supply existing and future planned projects. Rapid development in the North Natomas area will increase demand for potable water from the area's growing population. According to the 1988 SGPU EIR, maximum water demand in the year 2016 (buildout year) would be approximately 368.2 mgd (412,438 AFY).⁷ The Proposed Project is anticipated to contribute 341 AFY (0.304 mgd). These demands would not significantly contribute to reducing the available water supply. Therefore, this impact would be cumulatively <i>less than significant</i>.</p>	<p>LS</p>	<p>7.5-7 Increased demand for potable water. (Cumulative)</p> <p>None required.</p>	<p>NA</p>

5 Dave Schamber, Supervising Engineer, City of Sacramento Department of Utilities, personal communication, April 15, 2002.
 6 Kathy Mullen, Water and Sewer Superintendent, City of Sacramento Department of Utilities, personal communication, March 1, 2001.
 7 City of Sacramento, *Sacramento General Plan Update Draft Environmental Impact Report*, March 1987, page H-5.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Prior to Mitigation	Significance After Mitigation	Significance Prior to Mitigation	Significance After Mitigation
7.5-8 Increased demand for water treatment and infrastructure. (Cumulative)	None required.	LS	NA
<p>Rapid development in the North Natomas area will require additional water treatment facilities and infrastructure. As stated above under Impact 7.5-6, the Proposed Project would use a system of 12-inch lines that would tie into existing City infrastructure and water would be treated at the Sacramento River Water Treatment Plant or the Fairbairn Water Treatment Plant. With the planned expansion of both treatment plants, there would be adequate capacity to serve the planned growth under the NNCP. As stated under Impact 7.5-7, the Proposed Project would contribute 0.304 mgd, which would not constitute a cumulatively considerable increase in water treatment for the North Natomas area or the City of Sacramento, and therefore would not significantly contribute to cumulative treatment or water infrastructure impacts in the area. This impact would be considered cumulatively <i>less than significant</i>.</p>			
7.5-9 Increased demand for City wastewater collection, treatment, and disposal. (Project-specific)	None required.	LS	NA
<p>Table 7.5-3 shows the estimated wastewater demand of the Proposed Project. As stated above under the Environmental Setting, the Regional Plant has a current capacity of approximately 390 mgd, and currently receives approximately 181 mgd. The Proposed Project would contribute a demand of 0.210 mgd. The remaining capacity of approximately 209 mgd at the wastewater treatment facility would be adequate to accommodate wastewater treatment demand under the Proposed Project. In addition, the Phase 1 trunk lines planned under the CSD-1 Master Plan would provide adequate wastewater conveyance infrastructure to meet this demand. Therefore, this is considered a <i>less-than-significant impact for the Proposed Project</i>.</p>			

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.5-10 Increased demand for wastewater collection, treatment, and disposal. (Cumulative)</p> <p>Development in the North Natomas area will require additional wastewater treatment facilities in order to accommodate increasing demand from the area's growing population. According to the 1988 SGPU EIR, maximum wastewater demand in the year 2016 (buildout year) would be approximately 129.1 average daily dry-weather flow and 305.9 mgd peak wet weather flow.⁸ The Proposed Project would contribute 0.210 mgd to this demand. The addition of 0.210 mgd would not constitute a substantial increase in wastewater treatment demand for the North Natomas area or the City of Sacramento, and therefore would not be considered a cumulatively considerable contribution. In addition, adequate infrastructure would be available to serve the Proposed Project; therefore there would be no contribution to adverse impacts on wastewater infrastructure. This would be considered a <i>less than significant cumulative impact</i>.</p>	<p>LS</p>	<p>7.5-10 Increased demand for wastewater collection, treatment, and disposal. (Cumulative)</p> <p>None required.</p>	<p>NA</p>
<p>7.5-11 Increased demand for electricity and natural gas service. (Project-specific)</p> <p>The Proposed Project would construct approximately 751,000 sf of Regional Commercial land uses, and approximately 504,000 sf of Employment Center uses. Using SMUD's electricity demand rates for Commercial land uses, the projected electricity demand for the Proposed Project would be approximately 10,315 KW/day. SMUD has indicated that it could accommodate electricity demand created by the Proposed Project.⁹ With regard to natural gas services, PG&E has indicated that gas distribution lines and other existing infrastructure have ample capacity to serve the project site.¹⁰ Therefore, this is considered a <i>less-than-significant impact</i>.</p>	<p>LS</p>	<p>7.5-11 Increased demand for electricity and natural gas service. (Project-specific)</p> <p>None required.</p>	<p>NA</p>

8 City of Sacramento, *Sacramento General Plan Update Draft Environmental Impact Report*, March 1987, page I-5.
 9 Gene Hoppes, Engineering Designer 4, Sacramento Municipal Utilities District, personal communication, February 5, 2002.
 10 Hal Hackney, Gas Planning Engineer, PG&E, personal communication, October 16, 2002.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p>7.5-12 Increased demand for electricity and natural gas service. (Cumulative)</p>		<p>7.5-12 Increased demand for electricity and natural gas service. (Cumulative)</p>	<p>NA</p>
<p>The SGPU EIR estimates peak buildout demand for energy to be 2,158,746 kw.¹¹ Development in the North Natomas area and its associated effects on electricity and natural gas were taken into account in the NNCP and the SGPU. Rapid development in the North Natomas area will require additional electric and natural facilities in order to accommodate increasing demand from the area's growing population. Such facilities are under construction statewide, due to the recently recognized energy crisis. Future development will benefit from the current attention to energy issues and infrastructure, as the facilities currently being planned and constructed will be available to future development projects. The Proposed Project would not cause a substantial increase in energy demand for the North Natomas area or the City of Sacramento, and therefore would not significantly contribute to cumulative energy demand in the area. This impact would be cumulatively <i>less than significant</i>.</p>	<p>LS</p>	<p>None required.</p>	<p>NA</p>
<p>7.5-13 Increased production of solid waste in excess of available distribution or landfill capacity (Project-specific)</p>		<p>7.5-13 Increased production of solid waste in excess of available distribution or landfill capacity (Project-specific)</p>	<p>NA</p>
<p>The Proposed Project would construct approximately 751,000 sf of regional commercial land use and 504,000 sf of employment center use. Using the solid waste demand rates for Commercial, Office, and Retail/Warehouse land uses provided by the City, the projected solid waste demand for the Proposed Project would be approximately 18,054 cubic yards per day (6,589,710 cubic yards per year) would be generated. In addition, this solid waste generation would be subject to a minimum of 30 percent diversion to recycling facilities under Local Solid Waste Authority Ordinance 8. Office land uses generally divert up to 90 percent of solid waste and Commercial land uses can divert up to 50 percent of solid waste.¹² As stated above, the Kiefer Boulevard Landfill has a remaining capacity of approximately 90 million cubic yards.¹³ The project's demand for solid waste facilities could be accommodated by the Kiefer facilities. This is considered a <i>less-than-significant impact</i>.</p>	<p>LS</p>	<p>None required.</p>	<p>NA</p>

11 City of Sacramento General Plan, March 1987, Exhibit R-2.
 12 Mike Root, Waste Reduction Coordinator, City of Sacramento, personal communication, December 12, 2002.
 13 <http://www.ciwrmb.ca.gov/SWIS/detail.asp?PG=DET&SITESCH=34-AA-0001&OUI=HTML>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.5-14 Increased production of solid waste in excess of available landfill capacity. (Cumulative)</p> <p>Future development in the North Natomas area would result in increased demand on solid waste facilities from the area's growing population. The Proposed Project, in combination with other projects in North Natomas and the City of Sacramento, would contribute to an increase in solid waste disposal. The Proposed Project would result in a smaller solid waste demand than what was anticipated in plans for solid waste facilities expansions under the SGPU and NNCP. Therefore, the contribution of the Proposed Project and these alternatives would not be cumulatively considerable, and this would be considered a <i>less-than-significant cumulative impact</i>.</p>	<p>LS</p>	<p>7.5-14 Increased production of solid waste in excess of available distribution or landfill capacity. (Cumulative)</p> <p>None required.</p>	<p>NA</p>
<p>7.6-Public Health Hazards</p>			
<p>7.6-1 Creation of health hazards. (Project-specific)</p> <p>A Phase I ESA was performed at the project site by McLaren/Hart in 1999 (Appendix H) and did not identify any hazardous materials release sites located within a one-mile radius of the project site, with the exception of the Natomas Airport, which is located approximately 3,000 feet west of the project site. Although groundwater contamination was reported at the Natomas Airport, groundwater in the vicinity of the airport was determined to flow towards the west and south, away from the project site. Because groundwater contamination at the Natomas Airport site is flowing away from the project site, it would not affect the quality of groundwater underlying the project site and would not present a potential health hazard.</p> <p>As part of the Phase I ESA, shallow soil sampling was performed at the project site to determine whether historical agricultural activities, such as pesticide and herbicide application, had adversely impacted soil at the project site. As previously indicated on Table 7.6-1, the identified pesticides were detected at concentrations significantly below remedial levels for industrial and residential land uses, and were also well below the California threshold for toxicity. Therefore, the soil at the project site does not appear to be contaminated with pesticides or herbicides that could affect human health or the environment. In addition, the Phase I ESA did not identify any evidence of environmental conditions from any adjacent properties that would be a health or safety concern for people at the project site.</p>	<p>PS</p>	<p>7.6-1 Creation of health hazards. (Project-specific)</p> <p>(a) <i>If a Phase I Environmental Site Assessment (ESA) has not been prepared for the entire project site, one shall be prepared in conformance with American Society of Testing and Materials (ASTM) standards prior to any site disturbing activities associated with the Proposed Project. If a Phase I ESA has been prepared for a site, but the physical condition of the site or its adjacent properties has substantially changed (i.e., new development), the original Phase I ESA shall be updated by an environmental professional to ensure that the environmental liability associated with the project site has not changed.</i></p> <p><i>If the Phase I ESA concludes there is a potential for adverse site conditions to exist at the project site, soil and/or groundwater samples shall be collected by an environmental professional and analyzed for the appropriate contaminants. If the results of the analytical tests indicate contaminant levels that exceed remedial goals, or are above health and safety levels determined to be acceptable by the State for a specific land use, an environmental professional shall contact the Sacramento County Environmental Management District (SCEMD), or the appropriate regulatory agency, for guidance regarding site remediation. The project applicant shall initiate the recommendations of the regulatory agency to ensure that health and safety hazards do not exist.</i></p>	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Potential Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>It is possible that not all environmental conditions have been reported or identified at the project site, such as buried disposal sites, trash pits, or other underground storage devices. The presence of any of these, either on or adjacent to the project site, could generate conditions that could be a hazard to public health and the environment. Unearthing of any of the aforementioned unknown/potential sites could generate toxic or flammable conditions that could present immediately dangerous situations. The unknown presence and potential discovery of unknown hazards during site preparation and construction (excavation and grading) of the Proposed Project is considered a <i>potentially significant impact</i>.</p>		<p>(b) <i>If, during construction activities for the Proposed Project, evidence of hazardous materials contamination is observed or suspected through either obvious or implied measures (i.e., stained or odorous soil, or oil or discolored water), construction activities shall cease in the affected area. An environmental professional shall assess the situation and make appropriate recommendations.</i></p>	<p>NA</p>
<p>7.6-2 Safety hazards during construction. (Project-specific) Hazardous materials would be used in varying amounts during construction activities at the project site. Construction and equipment maintenance activities would use hazardous materials, such as: fuels (gasoline and diesel); oils and lubricants; paints and paint thinners; glues; cleaners (which could include solvents and corrosives in addition to soaps and detergents); and pesticides and herbicides. However, consistent with federal, State, and local laws and regulations addressing hazardous materials management and environmental protection, construction specifications would include the following requirements in compliance with applicable regulations and codes, including, but not limited to Titles 8 and 22 of the Code of California Regulations, Uniform Fire Code, and Division 20 of the California Health and Safety Code: all reserve fuel supplies and hazardous materials must be stored within the confines of a designated construction area; equipment refueling and maintenance must take place only within the staging area; construction vehicles shall be inspected daily for leaks; and a Spill Prevention Countermeasure and Control (SPCC) plan shall be prepared and implemented. In addition, all transportation of hazardous materials to and from the site must comply with DOT and Caltrans regulations.</p>	<p>LS</p>	<p>7.6-2 Safety hazards during construction. (Project-specific) None required.</p>	<p>NA</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>The types and amounts of hazardous materials used during construction of the Proposed Project would vary according to the nature of the activity; therefore, the specific hazardous materials and amounts that would be on site or transported cannot be determined at this time. In some cases, it is the <i>type</i> of hazardous material that is potentially hazardous; in others, it is the <i>amount</i> of hazardous material that could present a hazard. In any case, because development that would occur as a result of the Proposed Project would be required to comply with all federal, State, and local laws and regulations governing the use, storage, transportation, and disposal of hazardous materials during construction of the proposed UCP, this impact is considered <i>less than significant</i>.</p>	LS	7.6-3 Safety hazards. (Project-specific)	NA
<p>7.6-3 Safety hazards. (Project-specific) Nearly all of the land uses at the project site, involving the Proposed Project, would involve some level of use or storage of hazardous materials. In each case, the potential hazards would depend on what materials would be used, where the materials would be used, how they would be used, and who would use them. Retail and office-based businesses, such as those proposed for the project site, would generally use relatively small quantities of household-related hazardous materials when compared to other businesses, such as those engaged in manufacturing, research and development, light manufacturing, or automotive repair (service stations). Businesses that handle larger quantities of hazardous materials would often also use a wider variety of materials, which could include less common materials and acutely hazardous materials. Businesses that handle larger quantities of hazardous materials and acutely hazardous materials would also be subject to more regulation and oversight than businesses that handle smaller quantities of more common materials. In addition, employees of businesses that handle large quantities of hazardous materials would also typically receive special training (often required by law under OSHA) to help them understand the potential hazards they could encounter in the workplace.</p>	LS	7.6-3 Safety hazards. (Project-specific)	NA

S = Significant PS = Potentially Significant IS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Significance After Mitigation
<p>Although individual businesses use relatively small volumes of hazardous materials, the total volume of the hazardous materials managed by all of the businesses at the project site could be substantial, which would increase the opportunities for accidents and improper use, storage, and disposal. Because many hazardous materials are consumed through their use (i.e., fuel, paint, aerosols), the quantity of hazardous materials handled and stored would be greater than the volume of hazardous waste generated. In any case, the SCEMD has a hazardous waste collection program that safely collects, transports, and disposes of residual hazardous wastes, and commercial products are labeled to inform users of potential risks and to instruct users in appropriate handling procedures. The use of common hazardous materials is typically considered to pose an acceptable level of risk.</p>		
<p>The SCEMD, as the local CUPA for the Proposed Project, oversees federal and State hazardous materials registrations, underground storage tank programs, aboveground petroleum storage tank spill prevention control and countermeasure plans, risk management plans, and some fire safety planning. Additionally, businesses are regulated as employers by Cal/OSHA and are therefore required to ensure employee safety. Specific requirements include identifying hazardous materials in the workplace, providing safety information to workers that handle hazardous materials, and adequately training workers. Because of this regulatory structure, the business-related use of relatively small quantities of hazardous materials similar to household products would not pose greater risks than the use of such materials by households. For this reason, the use of relatively small quantities of common hazardous materials by businesses would not create substantial public health hazards.</p> <p>In addition, if businesses at the project site were to use relatively large quantities of hazardous materials (in comparison to office-based businesses) they could be subject to the requirements of the CalARP program. If properly managed (as is assumed and required by the Division of Environmental Health and State law), hazardous chemicals would generally pose minimal health and safety risks at the project site. Also, any facilities operating on the project site that use hazardous materials would be subject to the Hazardous Substance Management requirements presented in the North Natomas Community Plan, which include siting criteria, the preparation of a Hazardous Substance Management Plan, and hazardous material storage facility design. Because of the existing regulatory structure, the potential effect of this impact is considered <i>less than significant</i>.</p>		

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.6-4 Interference with an emergency response or evacuation plan. (Project-specific)</p> <p>The project site is located along the north side of I-80 near the intersection of Truxel Road and Gateway Boulevard. Currently, the project site is undeveloped and used for agriculture. No roads exist on the project site. As noted in Section 7.2, Traffic and Transportation, the roadways leading to and from the project site would allow for emergency response vehicles to easily access the project site, as well as the adjacent properties, if an emergency were to occur, be it fire, hazardous material spill, or some other type of safety-related catastrophe. Development of the Proposed Project, would improve emergency response capabilities by including roadway and street access into the interior of the project site.</p>	<p>LS</p>	<p>7.6-4 Interference with an emergency response or evacuation plan. (Project-specific)</p> <p>None required.</p>	<p>NA</p>
<p>Because the project site is undeveloped and is used for agriculture, there is no evacuation plan in operation at the project site. The Proposed Project would include construction of roadways that link to the surrounding area, so upon development of the project site, should an emergency occur, people and vehicles would be able to leave the site. In addition, the proposed roadways would not block or substantially change adjacent properties' transportation routes, so evacuation from those properties would not be altered.</p> <p>Because the Proposed Project would not interfere with emergency response or evacuation plans, this is considered to be a <i>less-than-significant impact</i>.</p>			
<p>7.6-5 Increase in hazardous materials use, storage, and transportation. (Cumulative)</p> <p>The cumulative context for hazardous materials-related impacts is the area within the boundaries of the City of Sacramento General Plan. As discussed in Impacts 7.6-2 and 7.6-3, construction and occupancy of the buildings associated with the Proposed Project would involve the transportation, use, and storage of various types and various amounts of hazardous materials, which would increase the frequency of hazardous material transport and the volume of hazardous materials being transported. However, because of the existing federal, State, and local regulatory framework overseeing the use of hazardous materials, the effects on the cumulative context would be <i>less than significant</i>.</p>	<p>LS</p>	<p>7.6-5 Increase in hazardous materials use, storage, and transportation. (Cumulative)</p> <p>None required.</p>	<p>NA</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance Without Mitigation	Mitigation Measure(s)	Level of Significance With Mitigation
<p>7.7-1 Increased stormwater runoff. (Project-specific) The project site is currently undeveloped and has previously been used for agriculture. The topography of the project site is flat, and has an elevation between 9 and 10 feet above msl. Sheet runoff does not occur at the project site, and surface water runoff either evaporates into the atmosphere or infiltrates into the ground. Because the project site is undrain by poorly drained soils that maintain a generally high groundwater table, and due to the near-surface impervious clayey nature of the soils at the project site, rainwater tends to pond on-site when the underlying soils become saturated. The project site is also surrounded by a slight earthen berm, so surface water does not run onto the project site.</p>	<p>7.7-1 Hydrology and Water Quality</p>	<p>7.7-1 Increased stormwater runoff. (Project-specific)</p>	<p>None required.</p>
<p>The drainage modeling conducted for the Proposed Project in September 2002 determined that two detention basins would be required to provide storage for surface water runoff at the project site. However, final design may determine that only one basin is required (Basin B). Figure 7.7-1 shows the approximate locations of the proposed detention basins, as well as the proposed configuration of the drainage system. Basin A (identified as DB-A on Figure 7.7-1) would be a dry detention basin located in the northeast portion of the project site, and Basin B (identified as DB-B) would be a linear wet retention/detention basin located along the southern boundary of the project site adjacent to I-80. These basins would drain to RD 1000 facilities. Once in the RD 1000 system, drainage from the project site would ultimately flow to the Sacramento River via the East Drainage Canal and the Natomas Main Drainage Canal.</p> <p>Basin A (Parcel 33) would be a 2.3± acre dry basin located in the northeast corner of the project site. The basin would have grass and would be designed to fill during moderate rainstorms.</p> <p>Basin A would have slopes with a ratio of about 5 to 1 (horizontal to vertical) and would be graded to minimize long-term ponding. Depending on adjacent land use, this basin could have a multi-use purpose as a park or nature area. The bottom elevation of Basin A would be approximately 5 ± feet below ground surface (ground surface is at 10 feet msl). Basin B would be linear in shape and is designed to permanently hold stormwater runoff, essentially as an on-site pond. Basin B is designed to have a permanent pool of approximately 6± acre-feet of water at elevation 4.0± feet. Basin B is expected to be landscaped with a walking path.¹⁴</p>	<p>LS</p>	<p>Increased stormwater runoff. (Project-specific)</p>	<p>None required.</p>

14 Watermark Engineering, Inc., Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, p.6.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance Prior to Mitigation	Level of Significance After Mitigation	Level of Significance After Mitigation
<p>Retaining walls up to 3± feet high would be used to increase storage capacity while maintaining gentle slopes. Table 7.7-1 provides a summary of the two detention basins, showing the land area required to contain a given volume of surface water runoff, and at what approximate depth the water in the basins would be when storing that volume. Table 7.7-2 illustrates the approximate elevation of water in each basin during a storm event. As illustrated by the data in Table 7.7-2, the detention basins are designed to effectively accept flows from the various design storms.</p> <p>In addition to the conveyance and storage infrastructure, a pump station would be constructed as part of the Proposed Project. The final configuration would be required to meet discharge rates specified by RD 1000.</p> <p>In summary, the Proposed Project has identified a drainage system to adequately convey and store projected on-site stormwater runoff that would be consistent with discharge criteria established through agreements between RD 1000 and the City of Sacramento.¹⁵ Because the Proposed Project can be accommodated within the existing RD 1000 drainage system and would not increase the potential for on- or off-site flooding over that which currently exists, the impact is considered to be <i>less than significant</i>.</p>	<p>LS</p>	<p>7.7-2 Urban contaminants in stormwater runoff associated with project construction and operation. (Project-specific)</p>	<p>7.7-2 Urban contaminants in stormwater runoff associated with project construction and operation. (Project-specific)</p>
<p>Implementation of the Proposed Project would require grading land for roadways, building foundations, parking areas, and landscaping. In addition, construction activities, such as excavation and trenching for utilities, would disturb soil. Construction site runoff, as well as dust generated from other sites, could contain soil and sediment, which could enter receiving waters and degrade water quality. Spills or leaks from heavy equipment and machinery (petroleum products and/or heavy metal), staging areas, or building sites (paints, solvents, and cleaning agents) could also adversely affect receiving water quality by polluting runoff. These potential impacts would generally be short-term and limited to the duration of construction.</p>	<p>LS</p>	<p>7.7-2 Urban contaminants in stormwater runoff associated with project construction and operation. (Project-specific)</p>	<p>7.7-2 Urban contaminants in stormwater runoff associated with project construction and operation. (Project-specific)</p>

15 Patrick Stiehr, Watermark Engineering, Inc., personal communication, October 16, 2002.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Project Mitigation	Level of Significance After Mitigation
<p>Prior to the initiation of site disturbing or construction activities at the project site, the project applicant would be required to obtain a General Construction Activity Stormwater Permit from the CVRWQCB. As indicated in the Regulatory Setting, General Permit applicants are required to submit a Notice of Intent (NOI), develop and implement a Stormwater Pollution Prevention Plan (SWPPP), eliminate or reduce non-stormwater discharges, and perform inspections of all BMPs. Examples of typical construction BMPs include, but are not limited to: erosion control BMPs such as mulch, hydroseeding, geotextiles and mats, and soil binders; sediment control BMPs such as silt fences, fiber rolls, gravel bags and storm drain inlet protection; and housekeeping practices such as stabilized construction entrances, vehicle fueling, spill prevention and control, and management of solid waste, concrete, paint, etc.</p> <p>In addition to the General Construction permit, the project applicant would be required to obtain a grading permit and prepare an erosion and sediment control plan (ESC Plan) in accordance with the Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control. The ESC Plan should include erosion control BMPs, sediment control BMPs and housekeeping practices to be implemented during construction.</p> <p>If groundwater were encountered during construction, the project applicant could be required to obtain and comply with the waste discharge requirements of the Central Valley RWQCB's General Order for Dewatering and Other Low-Threat Discharges to Surface Waters. The dewatering permit specifies standards for testing, monitoring, and reporting receiving water limitations and discharge prohibitions.</p>		

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Level of Significance After Mitigation
<p><u>Operation</u></p> <p>Implementation of the Proposed Project would create a substantial amount of impervious surfaces through the construction of building foundations, parking lots, and roadways that would collect urban pollutants. Currently, the project site is undeveloped and surface water runoff is contained on-site by low berms surrounding the project site. Upon development of the site, a drainage system would collect surface water runoff and discharge it into RD 1000's adjacent drainage system. Currently (pre-development), surface water runoff collected at the project site could contain sediment containing nutrients, naturally occurring metals and minerals, and organic matter. Upon development of the project site, activities that could increase the types and quantities of agricultural and non-naturally occurring pollutants in runoff include motor vehicle operations, landscaping maintenance, littering, careless storage and handling of materials, wildlife wastes, and pavement wear. Pollutants typically associated with urban uses, such as those that could be developed as a result of the Proposed Project, would include oil and grease, coliform bacteria, petroleum hydrocarbons (gasoline and diesel fuel), heavy metals such as lead, copper and zinc, suspended solids, and pesticides and herbicides not previously applied at the project site.</p> <p>In order to control urban pollutants, operation of the Proposed Project would be required to comply with the City of Sacramento's municipal stormwater NPDES permit and Stormwater Ordinance (Chapter 13.16) of the Sacramento City Code. The Stormwater Ordinance would include installation of structural and non-structural BMPs to control urban pollutants. Specific source-control and treatment control measures would be required in accordance with the City of Sacramento <i>Guidance Manual for On-Site Stormwater Quality Control Measures and Utilities Procedures Manual</i>.</p> <p>Use of water quality BMPs is also required under the agreement established between RD 1000 and the City of Sacramento, and the Proposed Project Preliminary Drainage Master Plan has identified design parameters for the two basins that are intended to reduce pollutants in runoff discharged to the RD 1000 canal. However, final design may determine that only one basin is required (Basin B). Basin A would function as a dry-extended Sato basin. The bottom of the basin has a gentle slope, and the flow line from the inflow pipe to the outflow would include a meander to lengthen the travel path. Grass on the bottom of the basin would also retard the flow. Such features provide a longer period of time for pollutants to settle out of stormwater before it is released from the basin. Details of final grading, landscape, and vegetation would</p>		

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>be provided to the City of Sacramento as site plans are refined. During small storm events, and during dry weather flows, a pipe would connect Basin A to Basin B to allow for stormwater to bypass Basin A and settle in Basin B, allowing Basin A to remain dry during most of the year. Basin B would have a permanent pool of approximately 6 acre-feet at elevation 4.0 feet. The basin would be used as a combination wet pond and dry extended Sato basin. The pumping would be delayed and/or regulated by the low-flow pump to lengthen the residence time of the runoff. The basin would be emptied over a period of about 48 hours, consistent with adopted drainage criteria for North Natomas.¹⁶</p> <p>Because stormwater originating from the project site, during construction and operation, would be highly regulated by federal and State permit requirements, as well as the requirements of the Sacramento City Code and agreements established between RD 1000 and the City of Sacramento, this impact, for the Proposed Project, is considered to be <i>less than significant</i>.</p>			
<p>7.7-3 Flooding conditions and water quality in the Sacramento River watershed. (Cumulative)</p>	<p>LS</p>	<p>7.7-3 Flooding conditions and water quality in the Sacramento River watershed. (Cumulative)</p> <p>None required.</p>	<p>NA</p>
<p>The cumulative context for hydrology and water quality issues is the RD 1000 area tributary to the Sacramento River in the Lower Sacramento watershed.</p> <p>The Proposed Project has identified a drainage system to adequately convey and store projected on-site stormwater runoff that would be consistent with discharge criteria established through agreements between RD 1000 and the City of Sacramento. As previously noted, the proposed drainage facilities have been configured to allow land use changes without affecting the drainage study.</p>			

16

Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, pp.9-10.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>The Proposed Project's contribution to cumulative drainage and flooding impacts would not be cumulatively considerable. Drainage criteria were developed to ensure sufficient capacity exists in the RD 1000 system to convey flows from the North Natomas area, including the project site, and to minimize the potential for downstream flooding in areas served by RD 1000 and along the Sacramento River.¹⁷ Other future development in the North Natomas Community Plan area that discharge to RD 1000 facilities would be required to develop and implement drainage systems that meet established flow criteria because of agreements established between the City and RD 1000. Therefore, the Proposed Project, in combination with other development in the RD 1000 service area, would not increase the potential for downstream flooding, and the cumulative impact is considered to be <i>less than significant</i>.</p> <p>The Proposed Project's contribution related to discharge of urban pollutants into the Sacramento River watershed would not be cumulatively considerable. Water quality protection measures at the project site would be subject to the requirements of the Basin Plan, and would be enforced through the applicable requirements of the Central Valley RWQCB's NPDES permits, as well as City NPDES municipal stormwater requirements. In addition, development in the City is required to include water quality treatment in drainage system design, as described for the Proposed Project. Compliance with these federal and State requirements and RD 1000/City of Sacramento water quality protection standards would help to protect the quality of water in the Lower Sacramento watershed as a result of urban runoff from the North Natomas Community Plan area.</p> <p>Therefore, cumulative impacts would be <i>less than significant</i>.</p>			

17 Patrick Stiehr, Watermark Engineering, Inc., personal communication, October 16, 2002.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Level of Significance After Mitigation
<p>7.8-1 Fill of jurisdictional waters of the United States. (Project-specific)</p> <p>The drainage canals that are located along the western and southern boundaries of the project site may be subject to the jurisdiction of the Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. If the drainage canals fall under the jurisdiction of the Corps, any project activities that result in discharge or placement of fill material into these canals would require a wetland delineation and permit under Section 404 of the Clean Water Act.</p> <p>The Proposed Project proposes to construct a roadway across the canal located along the western boundary of the project site for the Proposed Project. Impacts to habitats near the canal associated with construction of a roadway can be mitigated through compliance with the Natomas Basin HCP providing no fill is placed in the canal. However, if placing a culvert or support structure in the canal were required to construct the roadway, a wetland delineation and permit would be required. These standards also apply to any construction activities that could impact the drainage canals located along the southern boundaries of the project site for the Proposed Project. Impacts to jurisdictional Waters of the United States are considered <i>significant impacts</i>.</p>	<p>7.8 Biological Resources</p> <p>7.8-1 Fill of jurisdictional waters of the United States. (Project-specific)</p> <p>(a) <i>If it is determined that project construction activities will not result in the discharge or placement of fill materials (which include, but are not limited to construction materials such as culverts or support structures) in the canals that are located along the western and southern boundaries of the project site, impacts to habitats near the canal can be mitigated through implementation of Mitigation Measure 7.8-3(c) and (b).</i></p> <p>Or</p> <p>(b) <i>If it is determined that project construction activities will result in the discharge or placement of fill materials (which include, but are not limited to construction materials such as culverts or support structures) in the canals that are located along the western and southern boundaries of the project site, the project applicant shall retain a qualified biologist to prepare a wetland delineation and mitigation plan that provides for: (1) identification of waters of the U.S. that could be impacted by the Proposed Project, (2) avoidance of or no net loss of waters of the U.S. in the project area, and (3) the compensation methodologies for project impacts on waters of the U.S. The delineation and mitigation plan shall be submitted for review and approval by the Corps prior to initiation of construction, and shall include a five-year monitoring program to ensure success.</i></p> <p>Or</p> <p>(c) <i>In lieu of developing a mitigation plan that outlines the avoidance or creation of waters of the U.S., the project applicant shall purchase mitigation credits through a Corps-approved mitigation bank. The purchased credits shall fully offset the acreage and value of waters of the U.S. lost due to project construction.</i></p> <p><i>These measures may be implemented by obtaining applicable permits from the Army Corps of Engineers and CDFG.</i></p>	<p>7.8-1 Fill of jurisdictional waters of the United States. (Project-specific)</p> <p>S</p>
		<p>IS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.8-2 Removal of street trees and heritage trees. (Project-specific) There are no trees located within the project site. However, there are several large willow trees adjacent to the drainage canal on the western boundary of the Proposed Project site, as well as ornamental trees growing adjacent to the southern and eastern boundaries of the project site near the southern drainage canal. Implementation of the Proposed Project could impact trees adjacent to the project site through trimming, and/or grading and excavation near the tree's root systems. Any work performed near street trees would be conducted in accordance with the City's tree ordinance. Because no trees are present on the project site and any work performed on the site would be in compliance with the City's tree ordinance the project could affect trees, this is considered a <i>less-than-significant impact</i>.</p>	<p>LS</p>	<p>7.8-2 Removal of street trees and heritage trees. (Project-specific) None required.</p>	<p>LS</p>
<p>7.8-3 Loss of Swainson's Hawk habitat (nesting and foraging). (Project-specific) The Swainson's hawk nests primarily within riparian corridors in the Central Valley. However, the Swainson's hawk will also nest in isolated trees, trees along field borders or roads, small groves, or on the edges of remnant oak woodlands if they are located within flying distance (usually up to 5 miles) of suitable foraging habitat. The trees that are located immediately adjacent to the western boundary of the project site provide suitable nesting habitat for the Swainson's hawk. The project site mainly consists of a fallow field, and as such provides suitable foraging habitat for the Swainson's hawk, because this species typically forages for insects and small rodents in grasslands, fallow fields, livestock pastures, and low-growing croplands. There are approximately 25 Swainson's hawk nest sites within 5 miles of the project site Swainson's hawk is listed as a threatened species by the CDFG, and is protected under the provisions of the California Endangered Species Act (CESA) and the California Fish and Game Code (sections 3503 and 3511). Should the Proposed Project impact this species, the project applicant would have to demonstrate compliance with CESA. However, CESA only regulates "take" of individuals and does not address habitat loss that is not directly linked to the loss of individuals of State-listed species. Therefore, the loss of potential Swainson's hawk foraging habitat is addressed only as a CEQA issue, while the potential loss or disturbance of Swainson's hawk nest sites is a CEQA and CESA issue.</p>	<p>S</p>	<p>7.8-3 Loss of Swainson's Hawk habitat (nesting and foraging). (Project-specific) (a) <i>The project applicant/ developer shall comply with all requirements of the adopted Natamas Basin HCP and any additional mitigation measures identified in the Natamas Basin HCP EIR/EIS, and conditions in the ITPs issued by USFWS and CDFG.</i> (b) <i>Pre-construction surveys to determine whether any Swainson's Hawk nest sites occur on or within 1/2 mile of the lands designated for development.</i> (c) <i>Timing restrictions for construction activity if an occupied Swainson's hawk nest is identified (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.</i> (d) <i>An on-site biological monitor (CDFG-approved raptor biologist, funded by the developer) would be assigned to the project if construction or other project-related activities that could cause nest abandonment or forced fledging are proposed within the 1/4 mile buffer zone.</i> (e) <i>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.</i></p>	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measures (a)	Level of Significance After Mitigation
<p>The Proposed Project would convert land that supports suitable foraging and nesting habitat for Swainson's hawk into urban uses through rough and finished grading, construction of buildings, roads, and placement of related infrastructure. Implementation of the Proposed Project would remove approximately 120 acres of suitable Swainson's hawk foraging habitat, and could remove suitable nesting trees that are immediately adjacent to the western boundary of the project site. Loss of foraging habitat for this species could result in indirect mortality of adults and juveniles due to increased foraging competition, and increased foraging costs. Implementation of the Proposed Project could also result in the disruption of nesting Swainson's hawks, if they are found to be nesting within trees that are along the western boundary of the project site.</p>		<p>(f) 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.</p> <p>(g) Annually, prior to the Swainson's hawk nesting season (March 15 to September 15) and until build out of their Authorized Development has occurred, the City of Sacramento and Sutter County will notify each landowner of any property within the permit area(s) on which a Swainson's hawk nest tree is present, and will identify the nest tree, and alert the owner to the specific mitigation measures prohibiting the owner from removing the nest tree.</p>	
<p>Removal of Swainson's hawk foraging habitat and potential disturbance of Swainson's hawk nest sites are considered <i>significant impacts</i>.</p> <p>7.8-4 Loss of foraging and nesting habitat for non-listed special-status avian species. (Project-specific)</p>		<p>7.8-4 Loss of foraging or nesting habitat for non-listed special-status avian species. (Project-specific)</p> <p>(a) Implement Mitigation Measures 7.8-3 (a).</p> <p>(b) For the northern barrier, loggerhead shrike, tri-colored blackbird, and white-tailed kite.</p> <p>The project applicant shall retain a qualified biologist to conduct pre-construction (no earlier than 2 weeks prior to project construction activities) nest surveys within (1) the trees that are along the western and southern boundaries of the project sites, (2) any other trees that may be removed or damaged as a result of project construction or operation, (3) within suitable grassland nesting habitat for northern barrier, and (4) within suitable nesting habitat for tri-colored blackbird (e.g., within the blackberry thickets that are along the western boundary of the proposed project site). If active nests for any of these species are found, the nest sites shall be reported to CDFG. Removal of the nesting substrate that contains the nest(s) shall be</p>	

18 EIP Associates, unpublished data, January, 2000.

S = Significant PS = Potentially Significant IS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Significance After Mitigation
<p>Although there are no specific agencies or permitting authorities that regulate impacts on non-listed avian species, the above special-status avian species can be considered rare or endangered in accordance with CEQA because, due to their designation as California Special Concern species (species that are vulnerable to extinction because of declining population levels, limited ranges, and/or continuing threats), they meet the criteria of CEQA Guidelines subsection 15380(b) (see page 7.8-4). Therefore, the mortality of, loss of nesting habitat, or loss of foraging habitat for these species would be considered a <i>significant impact</i>.</p>	<p>S</p>	<p>IS</p> <p>conducted in accordance with CDFG direction. At a minimum, removal of the nesting substrate shall be delayed until after a qualified biologist has determined that the chicks in the nest(s) have fledged. In addition, prior to fledging, a buffer zone (equipment exclusion zone) of at least 100 feet should be established around the nest(s) to avoid disturbance to active nest(s) during project construction. If no active nests are found, no mitigation would be required.</p> <p>OR</p> <p>In lieu of conducting pre-construction surveys, the project applicant shall ensure construction activities do not occur during the nesting season of these species (typically March 1 through July 31). If construction occurs during the non-nesting season, the species would not be impacted.</p> <p>(c) For the western burrowing owl: Mitigation shall include, but not be limited to, the following items as identified in the Natomas Basin HCP:</p> <ol style="list-style-type: none"> 1) Prior to project construction, the project applicant shall retain a qualified biologist to conduct pre-construction surveys of suitable habitat within the project sites within 30 days prior to project construction to document the presence and distribution of burrowing owls. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be re-surveyed. 2) Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFG verifies through noninvasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.8-5 Loss of suitable habitat for giant garter snake. (Project-specific)</p> <p>The giant garter (GGS) snake is listed as a threatened species by CDFG and the USFWS and is protected under the provisions of the California and Federal Endangered Species Acts. This species is a highly aquatic snake, relying upon aquatic environments both for food and for shelter and escape from predators. Although no GGS were seen during the January 3, 2001 site visit of the Proposed Project site, the drainage canals and adjacent upland vegetation along the western and southern boundaries of the project site, provide marginally suitable habitat for GGS. The patches of vegetation along the margins of the canals provide adequate hibernation habitat and the banks of the canals provide suitable locations for basking. The USFWS typically considers all upland areas within 200 feet of aquatic giant garter snake habitat to be upland habitat for GGS. Implementation of the Proposed Project could result in the removal of suitable GGS aestivation habitat, which, in turn, could result in the incidental direct take of GGS (mechanical injury) and indirect take through habitat loss. Danger posed by construction activities is greatest during the winter dormant period (November through March) when these snakes are inactive below the ground and are unable to flee machinery. Loss of suitable habitat for the GGS and potential take of this species is considered to be a significant impact.</p>	<p>S</p>	<p>3) If nest sites are found, the USFWS and the CDFG shall be contacted regarding suitable mitigation measures, which may include a 300-foot buffer from the nest site during the breeding season (February 1 – August 31), or a relocation effort for the burrowing owls if the birds have not begun egg-laying and incubation or the juveniles from the occupied burrows are foraging independently and are capable of independent survival.</p> <p>4) If relocation of the owls is approved for the site by the USFWS and CDFG, the developer shall hire a qualified biologist to prepare a plan for relocating the owls to a suitable site.</p> <p>5) Where onsite avoidance is not possible, disturbance and/or destruction of burrows shall be offset through development of suitable habitation on Conservancy upland reserves.</p>	<p>LS</p>
<p>7.8-5 Loss of suitable habitat for giant garter snake. (Project-specific)</p> <p>(a) Implement Mitigation Measures 7.8-3 (a).</p> <p>(b) Timing restrictions: No grading, excavating or filling activities will take place within 30 feet of existing giant garter snake habitat between October 1 and May 1, unless approved by CDFG. By conducting earth-moving activities during the summer months when snakes are active, it is expected that snakes in the construction area will be able to avoid construction equipment such that direct injury or mortality would be avoided. Further, snakes will not be in their winter retreats where they are vulnerable to injury during earth-moving activities.</p> <p>(c) Dewatering requirements: Dewatering of existing habitat will begin after November 1, but no later than April 1 of the following year. All water must be removed from existing habitat by April 15, or as soon thereafter as weather permits, and the habitat will be kept dry without any standing water for 15 consecutive days after April 15 and prior to excavating or filling the dewatered habitat. By dewatering habitat between November 1 and April 1, snakes would not be attracted to construction zones when they emerge from their winter retreats. If habitat must be dewatered after April 15, it must remain dry for 15 consecutive days prior to</p>	<p>S</p>	<p>7.8-5 Loss of suitable habitat for giant garter snake. (Project-specific)</p>	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.8-6 Loss of biological resources. (Cumulative) Over the past 150 years, urban development has encroached upon and removed biological resources throughout the Central Valley, including wetlands, riparian vegetation, annual grasslands, and other habitats that support special-status species. The project site(s) supports small pockets of habitat, including suitable habitat for GGS, Swainson's hawk, and non-listed special status avian species. The project site(s) also supports potential jurisdictional waters of the United States and is adjacent to potential City of Sacramento heritage trees. Habitat values associated with the majority of habitats affected by this project are relatively low due to the proximity of urban uses, isolation and fragmentation, urban runoff, and invasion of non-native species. However, despite the relatively low values, many of these habitats are still used by special status species, and project impacts to these habitats and the species they support can be significant. As discussed in project impacts 7.8-1 through 7.8-5, construction of the Proposed Project would result in the loss and/or degradation of up to 126-acres of suitable foraging habitat for Swainson's hawk and non-listed special status avian species, suitable habitat for GGS, potential City of Sacramento heritage trees, and potential waters of the U.S. Impacts to these species and habitats can be fully mitigated at the project specific level to a level of less-than-significant. However, the Proposed Project's incremental contribution to cumulative impacts to these habitats and the species they support in the Sacramento region and throughout the Central Valley is considered a <i>significant cumulative impact</i>.</p>	<p>S</p>	<p>7.8-6 Loss of biological resources. (Cumulative) a) Implement Mitigation Measures 7.8-1 (a) through (c); 7.8-2; 7.8-3 (a) through (c); 7.8-4 (a) through (c); and 7.8-5 (a) through (c).</p>	<p>SU</p>
<p>7.9 Cultural Resources</p>			
<p>7.9-1 Historic resources. (Project-specific) There are no existing structures on the project site. As described under "Historical Background" above, no contributing element of the RD 1000 historic district is in the Proposed Project area. Construction of the Proposed Project would not result in the alteration or disturbance of historic resources, so <i>no impact</i> would occur.</p>	<p>NI</p>	<p>7.9-1 Historic resources. (Project-specific) None required.</p>	<p>NA</p>

S = Significant PS = Potentially Significant IS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

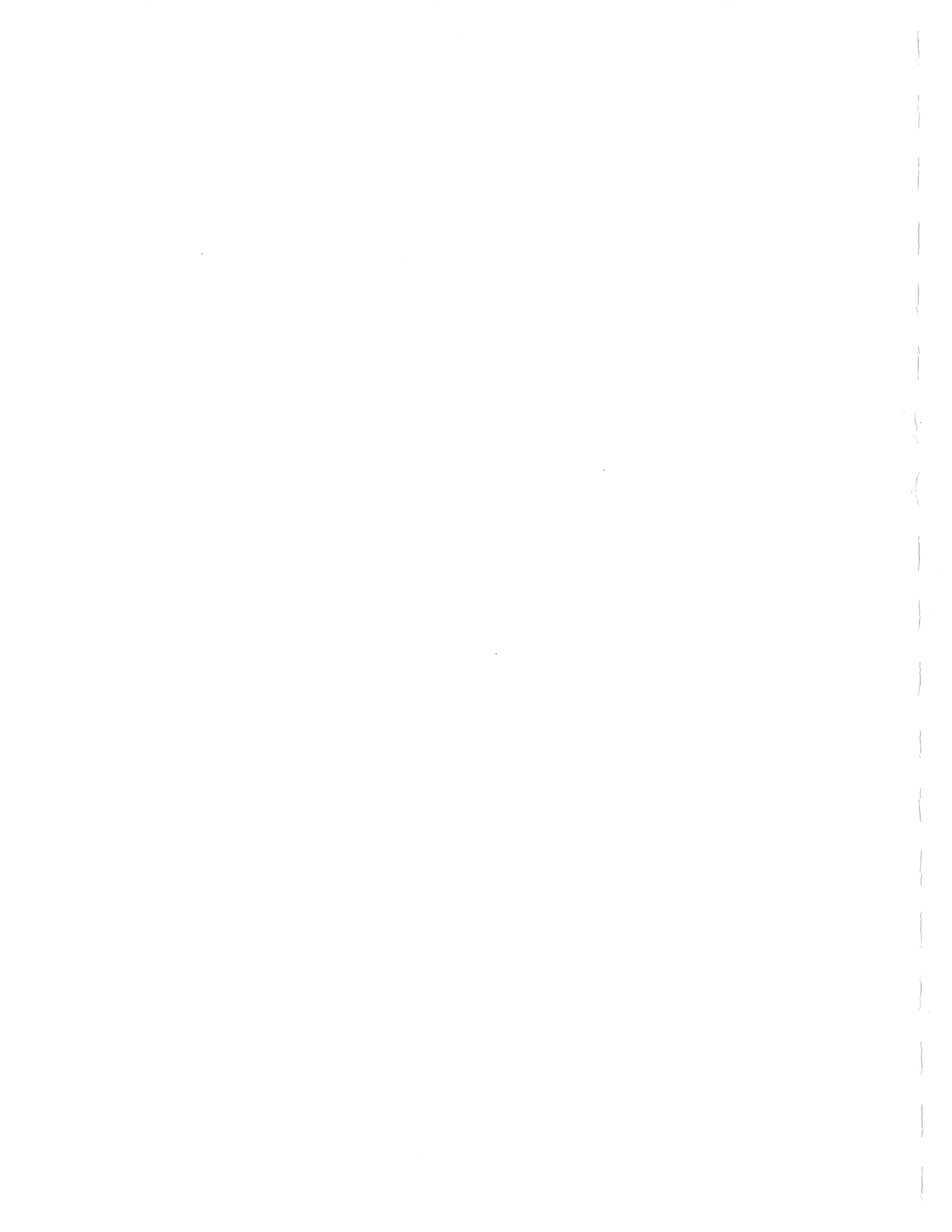
TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Significance After Mitigation	Significance After Mitigation
<p>7.9-2 Archeological resources. (Project-specific)</p> <p>No archaeological or prehistoric resources are known to exist in the project area. The only suggestion that there could be such resources, as yet unidentified, is the presence of isolated artifacts in the vicinity, as documented by Chavez. The Information Center, in the reply to the records search request, stated the following:</p> <p>Chavez noted two artifacts, however, one within the project (#9: Bowl Mortar) and another just outside (#6: Bowl Mortar rim fragment). This suggests the possibility that there was an early site somewhere in the local vicinity.</p> <p>This potential impact is the only one known for the Proposed Project area. A surface inspection can rarely be entirely certain that no buried archaeological or prehistoric resource is present within a project area. In the case of the Proposed Project, annual flooding prior to implementation of RD 1000 and agricultural practices since that time could have obscured surface evidence of an archeological site while leaving an intact or partially intact subsurface deposit. Therefore, this is considered a <i>potentially significant impact</i>.</p>	PS	<p>7.9-2 Archeological resources. (Project-specific)</p> <p><i>Should artifacts, exotic rock, bone, or a concentrated deposit of shell be uncovered during any future construction activities, an archeologist shall be consulted for an on-the-spot evaluation. If bone is uncovered that appears to be human, the County Coroner shall be contacted. If the coroner determines that the bone is likely to be Native American in origin, then the Native American Heritage Commission shall be contacted to identify most likely descendants.</i></p>	LS
<p>7.9-3 Loss of historic or archeological resources. (Cumulative)</p> <p>Implementation of the Proposed Project would not result in the loss of historic resources because there are no existing historic structures on the site. As stated under Impact 7.9-2, no archeological resources are known to exist in the area. Because the potential presence of resources on the project site is small, implementation of the Proposed Project would result in a <i>less-than-significant cumulative impact</i>.</p>	LS	<p>7.9-3 Loss of historic or archeological resources. (Cumulative)</p> <p>None required.</p>	NA

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

3. PROJECT DESCRIPTION



3.0 PROJECT DESCRIPTION

PROJECT BACKGROUND

In 2000, the Opus West Corporation (project applicant) submitted an application to the City of Sacramento for entitlements for development of approximately 126.4 acres of the Proposed Project site as a regional retail center (retail project). In July 2000, the City prepared and circulated a NOP for the proposed retail project to solicit feedback from responsible and trustee agencies and the general public on issues to be addressed in the EIR. In April 2001, the City held a public meeting on the proposed retail project to receive input from the community on concerns with regard to potential environmental impacts (copy of the NOP and responses are included as Appendix A).¹ Comments received included a desire to see a project alternative that addressed development of an automall on the project site. Subsequently, the project applicant submitted a revised application to the City and proposed different land uses and site design. The City released a second NOP on September 4, 2002 (see Appendix C).² The proposed land use designations and acreage distribution was modified to create a project that included an automall and was consistent with existing North Natomas Community Plan (NNCP) designations. The revised project analyzed both a proposed automall (Scenario A) and a retail project (Scenario B) and was renamed the Promenade at Natomas/Sacramento Auto Loop.

The Promenade at Natomas/Sacramento Auto Loop DEIR was released for public review in early April 2003. During this time the project applicant submitted a revised development application to the City to eliminate the proposed automall development scenario in lieu of a retail project that is less intense than the retail project (Scenario B) analyzed in the Promenade at Natomas/Sacramento Auto Loop EIR. For the purpose of the analysis contained in this RDEIR, it is assumed that because the project includes a less intense development than that evaluated for Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR, impacts associated with the Proposed Project would be less severe. Therefore, unless noted, the RDEIR assumes the same impacts and mitigation measures as those identified for Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR.

The following is a summary of changes made to Scenario B: Retail Project analyzed in the Promenade at Natomas/Sacramento Auto Loop DEIR.

- The total amount of development has been reduced 257,500 square feet (sf) from 1,512,500 sf to 1,255,000 sf.

1 Appendices are included in Volume II of the Promenade at Natomas/Sacramento Auto Loop Project DEIR. Available at the City's Planning Department, 1231 I Street, Sacramento.

2 Appendices are included in Volume II of the Promenade at Natomas/Sacramento Auto Loop Project DEIR. Available at the City's Planning Department, 1231 I Street, Sacramento.

- The total number of parking spaces has decreased from 7,034 to 5,596, a reduction of 1,438 spaces.
- The amount of land developed has decreased from 109.4 acres to 104.8 acres.
- The revised project does not attempt to change the existing Employment Center land use designation on the southwest portion of the site adjacent to Gateway Park Boulevard and Truxel Road. The original project located office uses to the northeast portion of the site (requiring a Community Plan Land Use Amendment), while the revised project (Proposed Project) locates office uses within the existing Employment Center designated land, ensuring improved access to the proposed light rail transit route.
- The larger floor-plate retail uses (over 100,000 square feet) have been shifted to the north and east portions of the site, medium sized floor-plate retail uses (below 30,000 square feet) have been placed along Interstate 80 at the southeastern portion of the site, a pedestrian oriented retail village has been placed in the center of the site, and office uses have been placed at the southwestern portion of the site, closer to Truxel Road.

PROJECT LOCATION

The site for the proposed Promenade at Natomas project is located on 126.4 acres within the City of Sacramento's NNCP area (see Figure 3-1). Light industrial uses within the City limits are located to the north of the project site and industrial office uses are located to the north and east of the site within the County. Interstate 80 (I-80) is located to the south; vacant land, Truxel Road, and the Natomas Marketplace shopping center are to the west of the Proposed Project site.

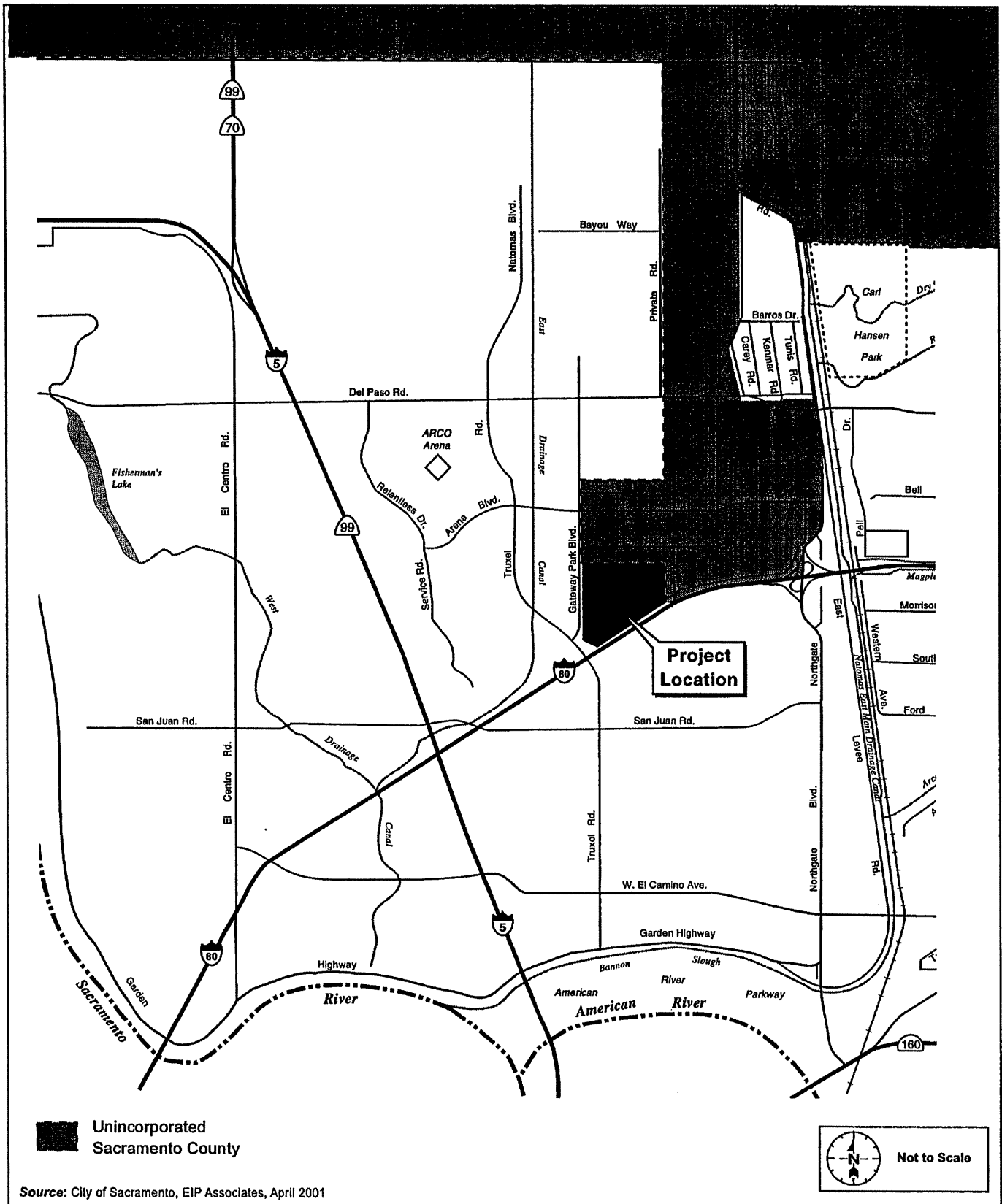
The approximately 9,038-acre NNCP area is located within both the City of Sacramento and Sacramento County limits. The project site is located entirely within the City of Sacramento. The NNCP area is generally bounded by Elkhorn Boulevard to the north, I-80 to the south, Steelhead Creek to the east, and the City of Sacramento to the west.

The Proposed Project site consists of 30.27± acres designated as Employment Center-50 (EC-50), 91.25± acres designated as Light Industrial uses and 4.88± acres of roadways under the NNCP. Under the City's General Plan, the project site designates 30.8 acres for Mixed Use Commercial and 95.6 acres for Heavy Commercial/Warehouse. The site is currently zoned as A-PUD (Agriculture - Planned Unit Development). Access to the project site from the north, south and west is provided by I-80, Truxel Road, and Gateway Park Boulevard. Access from the east is provided via North Freeway Boulevard.

PROJECT OBJECTIVES

The project applicant for the Proposed Project has identified the following project objectives:

- Increase economic activity and value in the City by developing retail and office uses that are complementary to the adjacent Natomas Marketplace, office and industrial uses.
- Provide for an appropriate use of unique property located near the I-80 and Interstate-5 (I-5) interchange with frontage along I-80.

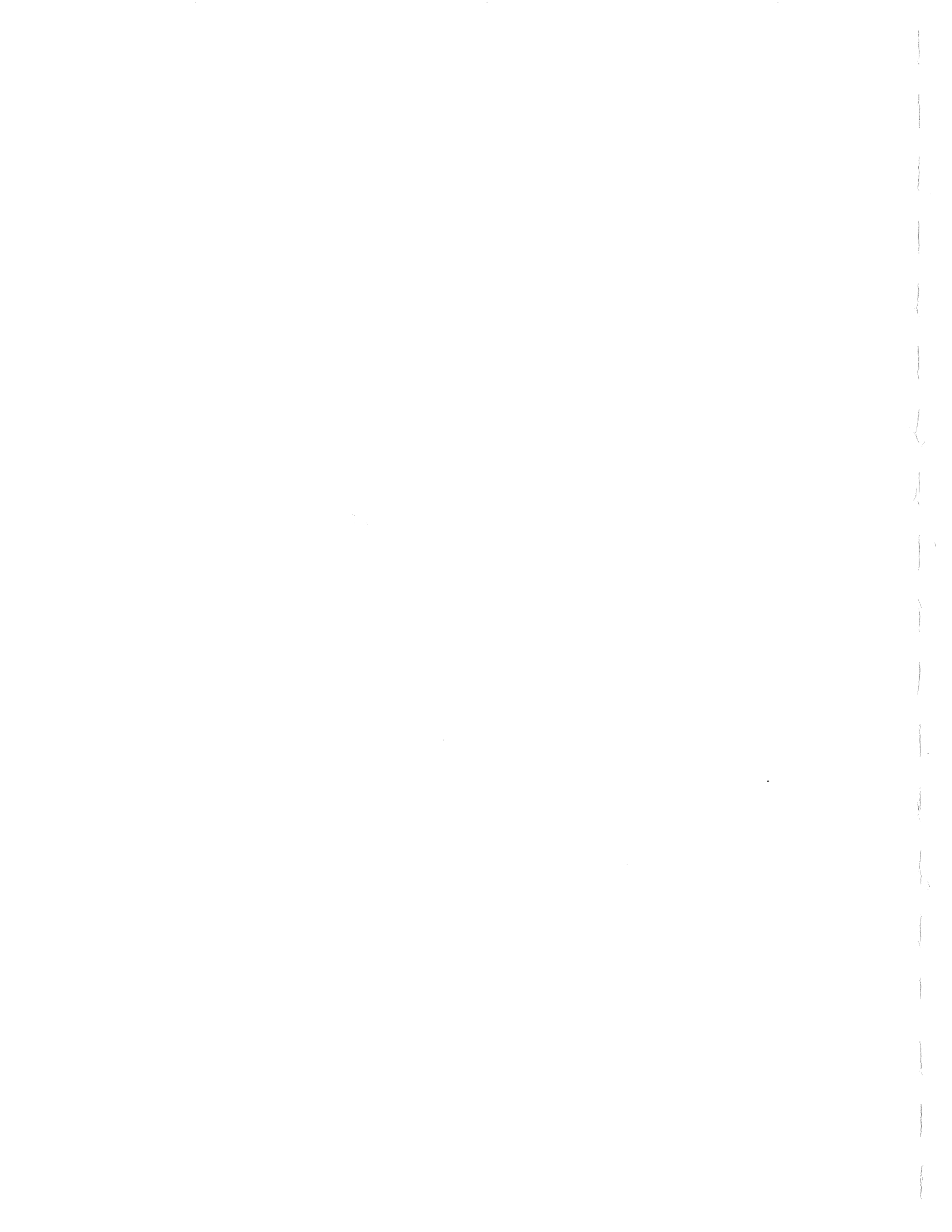


Source: City of Sacramento, EIP Associates, April 2001



FIGURE 3-1
Project Location

10483-00



- Provide additional employment opportunities within the City by developing office and retail uses.
- Develop detailed design guidelines for the project that meet the City's requirements and establish a functional and effective organization of buildings, circulation and parking; create a pleasant and distinctive environment; create a distinctive but compatible building image; create a safe and distinctive nighttime environment; and provide identity and information for tenants and users of the site through attractive signage while avoiding visual competition.

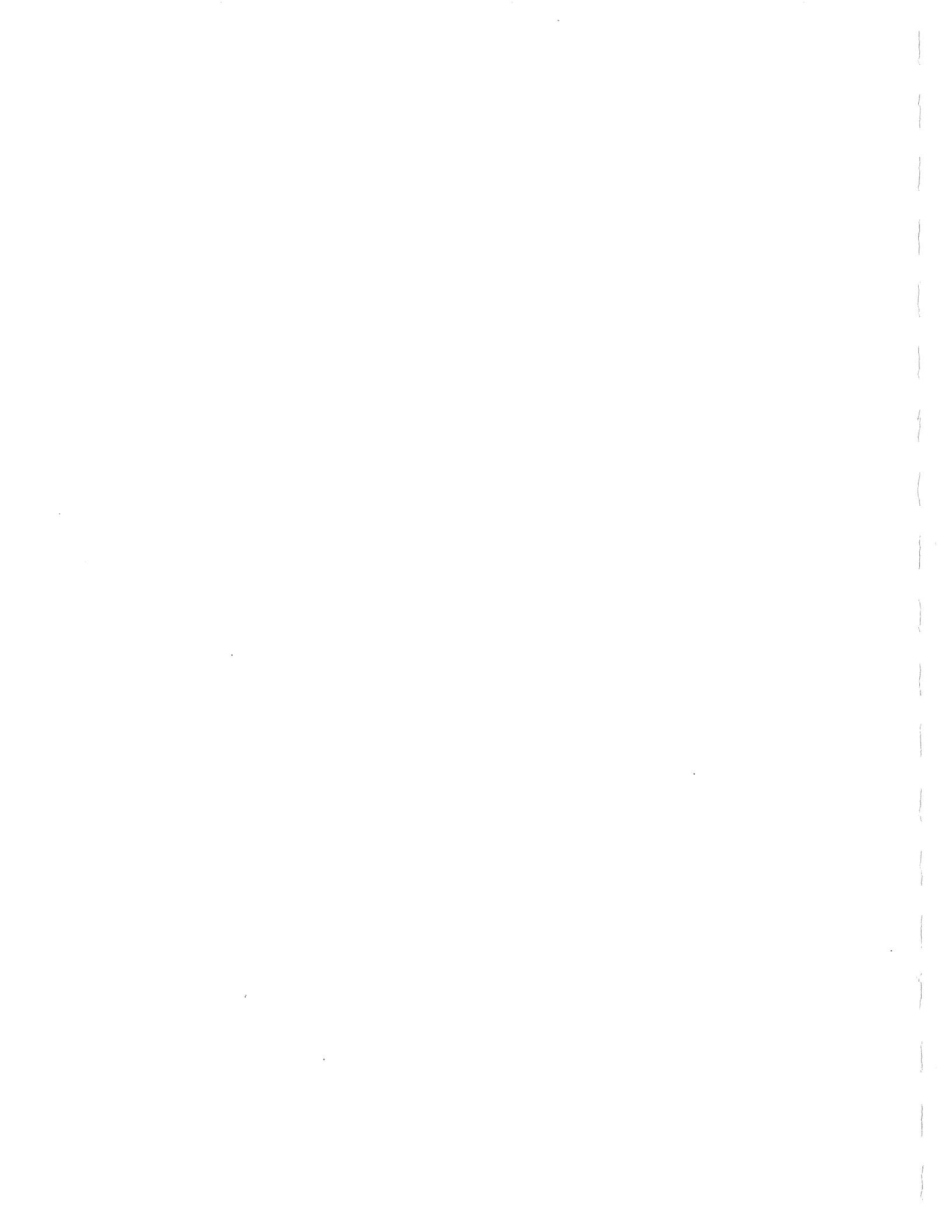
PROJECT DESCRIPTION

Summary of Project Changes

The primary differences in the revised retail project (Proposed Project) compared to Scenario B analyzed in the Promenade at Natomas/Sacramento Auto Loop DEIR include the following:

- The revised project does not attempt to change the existing Employment Center land use designation on the southwest portion of the site adjacent to Gateway Park Boulevard and Truxel Road. The original project located office uses to the northeast portion of the site (requiring a Community Plan Land Use Amendment), while the revised project (Proposed Project) locates office uses within the existing Employment Center designated land, ensuring improved access to the proposed light rail transit route.
- The larger floor-plate retail uses (over 100,000 square feet) have been shifted to the north and east portions of the site, medium sized floor-plate retail uses (below 30,000 square feet) have been placed along I-80 in the southeastern portion of the site, a pedestrian-oriented retail village has been located in the center of the site, and office uses have been located in the southwestern portion of the site, closer to Truxel Road.
- The total amount of development has been reduced 257,500 square feet (sf) from 1,512,500 sf to 1,255,000 sf; and the total number of parking spaces has decreased from 7,034 to 5,596, a reduction of 1,438 spaces; and the amount of land developed has decreased from 109.4 acres to 104.8 acres.

Under the Proposed Project, the project site would be divided into three areas, as shown on Figure 3-2. This has changed slightly from what was included in the previous analysis. Area 1 comprises the western portion of the site and contains approximately 30.8 acres. Of this acreage, approximately 2.68 acres is designated for a drainage easement and the required 100-foot freeway setback. In addition, 2.1 acres is designated for roadways leaving 26.02 acres is designated for Employment Center (EC-50-PUD) zoning (see Table 3-1). Area 2 is the central portion of the site and contains approximately 12.8 acres designated for Regional Commercial (SC-PUD). Area 3 consists of the northern and southern parcels and contains approximately 82.8 acres. Of the total acreage, 65.6 acres is designated for SC-PUD, 8.22 acres for a drainage easement, and 8.98 acres for roadways. Primary access to the project site would be provided from Gateway Park Boulevard and North Freeway Boulevard. Access to the site would be available from I-80 via Gateway Park Boulevard, with Truxel Road serving as the primary surface street connector between Gateway Park Boulevard and I-80 for exiting traffic. Truxel Road would also serve as a primary connector road to Gateway Park Boulevard from the Natomas area and other parts of Sacramento. Of this acreage, the following is proposed:



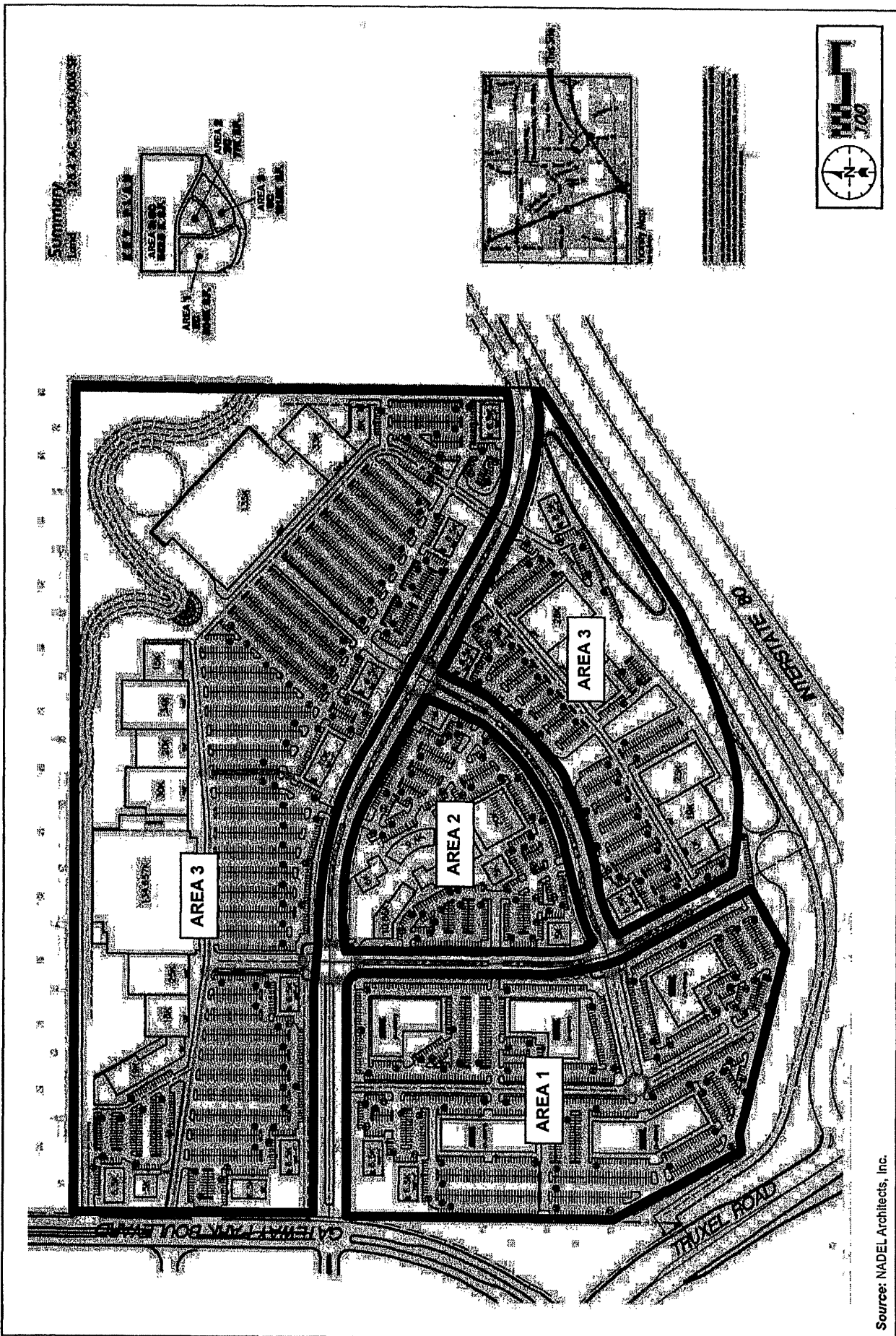
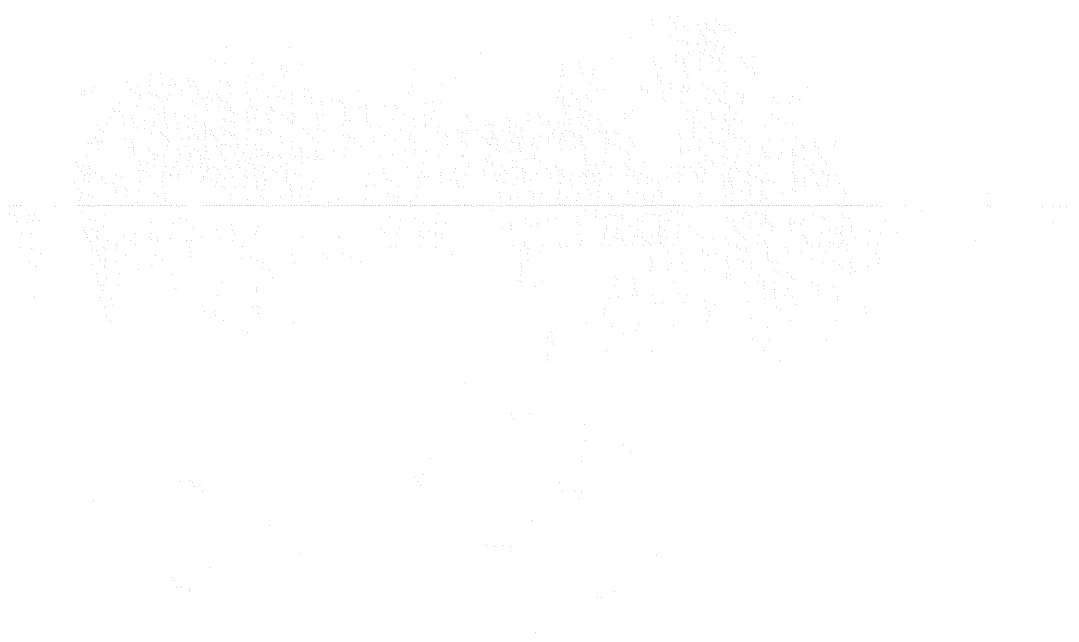


FIGURE 3-2
 Site Plan - Parcelization Plan

Source: NADEL Architects, Inc.



10483-01



- Area 1 provides for the development of 504,000 sf of employment center or office uses and approximately 1,593 parking spaces;
- Area 2 provides for the development of 77,000 sf of regional commercial uses with approximately 522 parking spaces;
- Area 3 provides for the development of 674,000 sf of regional commercial uses with a total of approximately 3,481 parking spaces;
- 10.9-acres of drainage easement/detention basin is included for Areas 1 and 3; and
- A total of 11.08 acres is required for roadways through the project site.

Table 3-1 provides a breakdown of the proposed land uses under the Proposed Project. The proposed land uses, site layout, and number of parking spaces within the project site have been defined.

Land Use Designation	Proposed Zoning	Developable Acreage (approximate)	Proposed maximum sf of Development	Parking Spaces
Area 1 (West Parcel)				
Employment Center	EC-50- PUD	26.02±	504,000	1,593
Drainage Easement/Setback requirement	A-OS-PUD	2.68±	N/A	N/A
Roadways	EC-50-PUD	2.1±	N/A	N/A
Area 2 (Central Parcel)				
Regional Commercial	SC- PUD ¹	12.8±	77,000	522
Area 3 (Northern and Southern Parcels)				
Regional Commercial	SC- PUD ¹	65.6±	674,000	3,481
Drainage Easement/Detention Basin(s)	A-OS-PUD	8.22±	N/A	N/A
Roadways	SC-PUD ¹	8.98±	N/A	N/A
Total Acreage/sf/spaces		126.4	1,255,000	5,596
SOURCE: Opus West Corporation, October 24, 2003.				
NOTES:				
1 The SC-PUD zoning district will allow regional commercial and retail uses to be developed.				

Lighting

The Proposed Project would include overhead lighting in parking lots and on buildings. Retail and employment-center buildings would include lighting adjacent to buildings and in parking areas that would remain on during the evening and night hours. The City of Sacramento Zoning Ordinance requires that exterior lighting, if provided, reflect away from residential areas and public streets (Sacramento City Code, Chapter 17.68.030). The project lighting has been designed to direct light downward and toward the interior of the project site in compliance with the City's requirements.

Landscaping

The Proposed Project would include project landscaping around the proposed buildings and parking areas. Project landscaping would meet the City of Sacramento's landscaping requirements. The project would be designed to comply with the City of Sacramento Zoning Ordinance, which requires that parking lot tree shading include trees throughout the lot surface to ensure that, within 15 years after establishment of the parking lot, at least 50-percent of the parking areas would be shaded (Sacramento City Code, Chapter 17.68.010). In addition, Chapter 17.56.050 of the City Code requires that each EC-PUD provide open space in the form of public plazas, courtyards, and landscaped parks that provide for active and passive recreation, and that plazas and open space developed in conjunction with office buildings should be accessible to the public and shall be oriented to pedestrian linkages throughout the area. Open space would be located adjacent to people-oriented uses and designed to comply with this ordinance.

In addition, landscaping would be required for parking lot shading. The shading for customer parking areas would meet the City Standard of 50 percent shading (drive isles and parking spaces) in 15 years.

Infrastructure

Water

The water infrastructure system for the Proposed Project includes a series of 12-inch water lines which would tie into existing 12-inch City water lines that are located in the Truxel Road and Gateway Boulevard public right-of-way. Irrigation of project landscaping would use potable water. If the Proposed Project is approved, the final design of the water system may be required to include a booster pump.

Wastewater

The wastewater infrastructure for the Proposed Project includes a series of 6-inch and 8-inch lines, which would tie into existing CSD-1 facilities. A 21-inch sewer line would be constructed at the end of North Freeway Boulevard, at the edge of the Proposed Project site, and would traverse west across the project site to Gateway Park Boulevard. The last 400-feet would increase in size to a 24-inch line. The sewer line would head north approximately 800-feet, turn west and bisect with the East Main drainage canal and a temporary lift station to be constructed below the drainage canal. The lift station connects to a 30-inch sewer main (existing Northwest interceptor pipeline) that runs parallel to the Steelhead Creek. In the future the City is proposing to remove the temporary lift station and relocate the Northwest interceptor pipeline to the west side of the drainage canal.

Storm Drainage

The preliminary study prepared for the storm drainage system for the Proposed Project includes a combination of surface and sub-surface piping system that would route stormwater from the approximately 100 drop inlets into one of two detention basins (see Figure 7.8-1 in Section 7.8, Hydrology and Water Quality). However, the final design may determine that only one basin is required (Basin B). The preliminary study prepared for storm drainage shows that Basin A is designed to be an approximately 8.1 acre-foot dry detention basin located in the northeast portion of

the project site, and Basin B is designed to be an approximately 19 acre-foot linear wet retention/detention basin located along the southern boundary of the project site adjacent to I-80. During small storms, and during dry weather flows, a pipe would connect Basin A with Basin B to allow for stormwater to bypass Basin A and settle in Basin B, allowing Basin A to remain dry during most of the year. Basin A is designed to have a multi-use purpose as a park or nature area. From the detention basins, a pump station would be constructed along the southern boundary of the project site to discharge the stormwater from the project site into the adjacent Reclamation District 1000 (RD/1000) canal system. The final configuration for the pump station would be required to meet discharge rates specified by RD/1000. Once in the RD/1000 canal, water would ultimately be discharged into the Sacramento River via Steelhead Creek and the Natomas Main Drainage Canal. The proposed drainage system would be constructed to City and RD/1000 standards.

Offsite Infrastructure

Offsite infrastructure for the Proposed Project includes construction of an approximately 2,000 foot-long section of a 24-inch sewer line along Gateway Boulevard and through an undeveloped parcel located to the west of Gateway Boulevard to connect to the Northwest interceptor. No off-site detention facilities would be required.

Environmental Checklist

An environmental checklist was prepared for the Promenade at Natomas/Sacramento Auto Loop DEIR and is included in Appendix B of the Promenade at Natomas/Sacramento Auto Loop DEIR Volume II Appendices. The findings included within the environmental checklist are still relevant to the revised project. The environmental checklist has determined that within some environmental issue areas the impact is either a less-than-significant impact or no impact. Each technical section of the EIR will summarize any relevant findings from the environmental analysis included in the Checklist. Please see Appendix B for more detail.

LEAD AND RESPONSIBLE AGENCIES

The City of Sacramento is the lead agency for preparation of the Promenade at Natomas environmental analysis. In conformance with sections 15050 and 15367 of the State CEQA Guidelines, the City of Sacramento has been designated the "lead agency" which is defined as the "public agency which has the principal responsibility for carrying out or disapproving a project."

Lead Agency Contact

City of Sacramento Planning and Building Department:

Grace Hovey, Associate Planner
 Environmental Planning Services
 1231 I Street, Suite 300
 Sacramento, California 95814
 (916) 264 -7601

No Responsible Agency, which is defined as a public agency other than the lead agency that has discretionary approval over the project, has been identified.

REQUIRED DISCRETIONARY ACTIONS

The discretionary actions necessary for project approval include, but are not limited to, the following:

Lead Agency

Certification of the EIR

Certification that the EIR adequately identifies the significant environmental effects of the Proposed Project, pursuant to CEQA, the State CEQA Guidelines, and the City of Sacramento CEQA Guidelines.

Discretionary Entitlements

In order to develop the Proposed Project, the entitlements requested include the following:

- Development Agreement between the City and OPUS West Corporation regarding development of this site;
- City of Sacramento General Plan Amendment to change 30.8± acres designated for Mixed Use and 95.6± acres designated for Heavy Commercial or Warehouse uses to 30.8± acres designated for Mixed Use and 95.6± acres designated for Regional Commercial and Offices;
- NNCP Amendment to change 30.27± acres designated for Employment Center-50 and 91.25± acres designated for Light Industrial uses and 4.88± acres of roadways to 26.02± acres designated for Employment Center-50, 78.4 acres designated for Regional Retail, 109± acres designated for parks/open space, and 11.08± acres of roadway;
- Re-zone 126.4± gross acres of land zoned A-PUD to 28.12± acres zoned Employment Center-50 Planned Unit Development (EC-50 PUD) and 87.38± acres zoned as Shopping Center Planned Unit Development (SC-PUD) and 10.9± acres zoned for drainage (A-OS-PUD);
- Planned Unit Development Establishment with associated PUD Guidelines and PUD Schematic Plan;
- Tentative Subdivision map; and
- Special Permit for retail uses.

Project Approval

The Proposed Project is subject to the approval of the City of Sacramento City Council. Project approval would also entail adoption of Findings of Fact and a Statement of Overriding Considerations by City Council. The City Council must take final action on all the entitlements listed above with the exception of the tentative map and special permit. Unless appealed, the Planning Commission shall take final action regarding the tentative map and special permit.

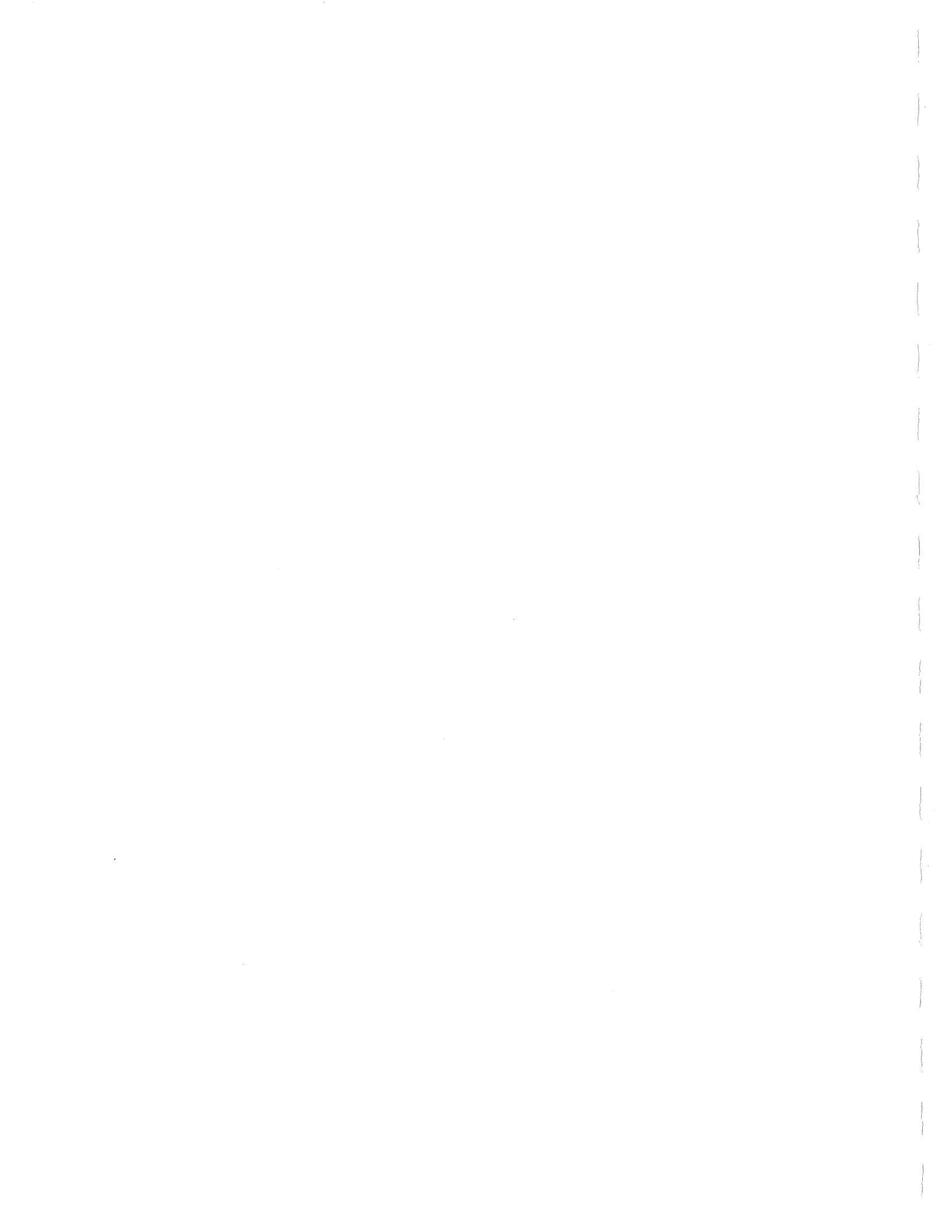
Mitigation Monitoring Plan

A Mitigation Monitoring Plan would be developed to ensure that any measures required to mitigate significant impacts of the project are implemented.

Project Schedule

It is anticipated that construction for the project would commence in the late spring early summer of 2003.

- Planning entitlements – Spring 2004
- Infrastructure design – Spring 2004
- Grading permits – Summer 2004
- Building permits – Winter 2004
- Substantial project completion – Fall 2005



4. ALTERNATIVES TO THE PROPOSED PROJECT

4.0 ALTERNATIVES

INTRODUCTION

The purpose of this chapter is to identify and describe the alternatives to the Proposed Project. Project alternatives are developed to reduce or eliminate the potentially significant adverse environmental effects of the Proposed Project while still meeting most of the basic project objectives. CEQA requires that a No Project Alternative be analyzed within each EIR.

California Environmental Quality Act Requirements

An EIR must evaluate a reasonable range of alternatives to the Proposed Project, or to the location of the Proposed Project, that 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 (CEQA Guidelines, section 15126.6). An EIR need not evaluate the environmental effects of alternatives in the same level of detail as the Proposed Project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the Proposed Project. CEQA provides the following guidelines for discussing alternatives to a Proposed Project:

- The specific alternative of the “no project” shall also be evaluated along with its impacts....If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines, section 15126.6 subd.(e)(2)).
- The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the proposed objectives, or would be more costly (CEQA Guidelines, section 15126.6 subd.(b)).
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines, section 15126.6 subd.(d)).
- 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 range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making....An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative (CEQA Guidelines, section 15126.6 subd.(f)).

The choice of alternatives is guided primarily by the need both to reduce or eliminate project impacts and to achieve project objectives. The objectives of the project were used to identify appropriate alternatives. As stated in Chapter 3, Project Description, the Proposed Project objectives are to:

- Increase economic activity and value in the City by developing retail and office uses that are complementary to the adjacent Natomas Marketplace, office and industrial uses.
- Provide for an appropriate use of unique property located near the I-80 and Interstate-5 (I-5) interchange with frontage along I-80.
- Provide additional employment opportunities within the City by developing office and retail uses.
- Develop detailed design guidelines for the project that meet the City's requirements and establish a functional and effective organization of buildings, circulation and parking; create a pleasant and distinctive environment; create a distinctive but compatible building image; create a safe and distinctive nighttime environment; and provide identity and information for tenants and users of the site through attractive signage while avoiding visual competition.

ALTERNATIVES CONSIDERED AND DISMISSED FROM FURTHER CONSIDERATION

The requirement that an EIR evaluate alternatives to the Proposed Project or alternatives to the location of the Proposed Project is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained while reducing the magnitude of, or avoiding, the environmental impacts of the Proposed Project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the Public Resources Code and the CEQA Guidelines direct that the EIR need "set forth only those alternatives necessary to permit a reasoned choice." The CEQA Guidelines provide a definition for "a range of reasonable alternatives" and, thus, limit the number and type of alternatives that may need to be evaluated in a given EIR. According to the CEQA Guidelines:

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.

First and foremost, alternatives in an EIR must be feasible. In the context of CEQA, "feasible" is defined as:

capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Further, the following factors may be taken into consideration in the assessment of the feasibility of alternatives: site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and the ability of the proponent to attain site control. Finally, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

Alternatives that would not meet any of the project objectives or reduce significant impacts evaluated in this EIR were not considered further. Uses that would not be consistent with the current land use designations or zoning (e.g., high density housing) were not considered, because they would not meet the project objectives and were not reasonably foreseeable uses should the City Council deny the project.

ALTERNATIVES CONSIDERED WITHIN THIS EIR

As stated above, the purpose of the alternatives analysis is to lessen or avoid significant environmental effects that have been identified in the EIR. A total of four alternatives are evaluated in this RDEIR. A number of alternatives that could potentially meet the project objectives were considered as a part of the environmental review for the project. Characteristics of each of the following alternatives and an analysis of potential environmental effects are discussed below. The following project alternatives were evaluated:

The No Project/No Development Alternative – This alternative assumes the Proposed Project will not be developed. The project site would remain agricultural land and would not be developed in the future.

The Community Plan Buildout Alternative - Under this alternative, the project site could be developed in the future for light industrial uses, consistent with the existing land use and zoning designations under the NNCP. This alternative proposes approximately 399,000 sf of office uses (1,330 employees) and 1,550,000 sf of warehouse uses with 1,550 employees. Respective portions of the site currently designated A-PUD would require rezoning to EC-50 PUD and M-1(S) PUD, consistent with the existing Community Plan designation of EC-50, and Light Industrial.

The Retail/Mixed Use Alternative – This alternative proposes retail, office, and warehouse/light manufacturing uses, but the total square footage for this alternative would be slightly more than the Proposed Project. Areas 1 and 2 would be zoned as SC-PUD in order to be utilized as retail space. Area 3 would be zoned M-1 and EC, which could be used as light manufacturing, office and retail.

The Offsite - Reed Avenue Alternative – This alternative includes a 92-acre site located in West Sacramento east of Interstate 80 (I-80). The site is bounded by I-80 to the west, Harbor Boulevard to the east, and Reed Avenue to the north. Uses on the site include approximately 750,000 sf of retail uses, 762,500 sf of office uses, and a parking garage.

Each of the alternatives is described in more detail and analyzed below. A discussion of the “environmentally superior alternative” appears at the end of this chapter.

Alternative 1: No Project Alternative

Under CEQA, the No Project Alternative must consider the effects of foregoing the project. The purpose of analyzing the No Project Alternative is to allow decision makers to compare the impacts of the Proposed Project versus no project. The No Project Alternative describes the environmental conditions that exist at the time that the environmental analysis is commenced (CEQA Guidelines, section 15126.6(e)(2)).

Alternative 1 would not develop the project site. The project site would remain, as it is currently, undeveloped former agricultural land.

Land Use and Planning

Under Alternative 1, the No Project Alternative would not result in any changes to the site so it would not create any incompatibilities with existing surrounding uses. There would be no General Plan Amendment or rezone required but this alternative would not promote the achievement of general plan goals or policies. In addition, under the No Project Alternative, no development would occur; therefore, there would be no assistance in furthering the vision of the NNCP of providing an employment center near Interstate 80 and Truxel Road. The No Project alternative appears to be inconsistent with the NNCP.

Socio-Economic Effects

Under the No Project Alternative there would not be any development that would result in changes to the site or new uses. It is not anticipated that this alternative would lead to any negative socio-economic effects due to increased retail competition.

Population, Employment and Housing

Under the No Project Alternative, no development would take place; therefore, the number of jobs in the NNCP area would not change from current conditions. This alternative would not include the 3,604 jobs assumed under NNCP buildout.

Transportation and Circulation

Under the No Project Alternative, the City of Sacramento would not approve any development for the project site and the site would remain in its current vacant state. Tables 4-1, 4-2, and 4-3 show the baseline levels of service and the baseline I-80 mainline and interchange operations for the No Project Alternative. Because there would be no traffic generated, there would be no impacts associated with an increase in traffic.

Air Quality

No construction activities would occur under this alternative and there would be no impacts associated with air quality.

Noise

Under the No-Project Alternative, the site would not be developed and there would be no construction noise. In addition, there would be no changes in traffic volumes relative to baseline conditions. As a result, there would be no increase or decrease in traffic noise levels under this Alternative, so no impact would occur.

TABLE 4-1

ALTERNATIVE 1 BASELINE LEVELS OF SERVICE

Intersection	Control	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
Del Paso Rd. / Gateway Park Blvd.	Signal	C	26.3	C	25.2	C	23.7
Del Paso Rd. / National Dr.	Signal	B	13.3	B	18.4	B	12.0
Northgate Blvd. / Del Paso Rd.	4-Way Stop	C	23.2	F	51.8	B	10.4
Truxel Rd. / Arena Blvd.	Signal	B	17.8	C	24.8	B	13.0
Arena Blvd. / Gateway Park Blvd.	Signal	C	27.5	C	31.1	C	25.3
N. Market Blvd. / Sierra Point Dr.	Stop Sign	A	2.2	C	17.2	A	0.9
N. Market Blvd. / National Dr.	Signal	B	15.4	C	21.2	B	12.9
N. Market Blvd. / N. Freeway Blvd.	Stop Sign	A	2.4	A	6.4	A	1.4
N. Market Blvd. / Northgate Blvd.	Signal	C	27.5	C	26.7	B	19.5
Gateway Park Blvd. / Raley's Dr.	Stop Sign	A	0.6	A	0.8	A	1.2
Truxel Rd. / Gateway Park Blvd.	Signal	B	19.7	C	27.0	C	22.7
Lennane Dr. / N. Freeway	Stop Sign	A	3.8	A	0.0	A	4.3
Truxel Rd. / I-80 West Ramps	Signal	A	10.0	B	11.3	B	10.6
Truxel Rd. / I-80 East Ramps	Signal	B	18.0	B	15.8	B	12.6
Northgate Blvd. / I-80 West Ramps	Signal	A	9.4	A	7.0	A	7.5
Northgate Blvd. / I-80 East Ramps	Signal	C	20.1	B	14.3	B	14.2
Truxel Rd. / San Juan Rd.	Signal	E	58.7	D	35.8	C	31.6
Northgate Blvd. / San Juan Rd.	Signal	C	30.0	C	31.8	C	29.3
Gateway Park Blvd. / N. Freeway Blvd.	na	na	na	na	na	na	na

NOTES:
¹ LOS = Level of Service
² Weighted average control delay in seconds
 Shaded values indicate a potential significant impact.
 na = Not applicable (intersection does not exist)
 SOURCE: Dowling associates, Inc., 2002.

TABLE 4-2

ALTERNATIVE 1 BASELINE I-80 MAINLINE OPERATIONS

Location	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS	V/C	Vol	LOS	V/C	Vol	LOS	V/C	Vol
Eastbound									
I-5 to Truxel Rd.	C	0.65	5,341	D	0.74	6,078	B	0.51	4,191
Truxel Rd. to Northgate Blvd.	C	0.58	4,793	C	0.70	5,780	B	0.51	4,190
Northgate Blvd. to Norwood Ave.	C	0.67	4,443	E	1.00	6,572	C	0.65	4,307
Westbound									
Norwood Ave. to Northgate Blvd.	F	1.02	6,713	C	0.69	4,552	C	0.64	4,255
Northgate Blvd. to Truxel Rd.	C	0.72	5,887	C	0.62	5,057	C	0.53	4,372
Truxel Rd. to I-5	C	0.64	6,289	C	0.55	5,419	B	0.44	4,341

1 LOS = Level of Service
 2 V/C = Volume / Capacity
 3 Vol = Traffic Volume
 NOTE: Shaded values indicate a potential significant impact.
 SOURCE: Dowling Associates, Inc., 2002.

TABLE 4-3

ALTERNATIVE 1 BASELINE I-80 INTERCHANGE OPERATIONS

Ramp	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS	D(0)	Vol	LOS	D(0)	Vol	LOS	D(0)	Vol
Eastbound I-80									
Truxel Rd. Off-Ramp	B	15.9	1226	B	18.1	1029	B	12.5	652
Truxel Rd. South On-Ramp	C	176	161	C	371	340	C	370	339
Truxel Rd. North On-Ramp	B	18.9	517	C	22.7	391	B	16.7	312
Northgate Blvd. Off-Ramp	B	14.2	1047	B	17.2	690	B	12.5	478
Northgate Blvd. South On-Ramp	C	21.0	311	D	33.6	1018	C	20.3	240
Northgate Blvd. North On-Ramp	C	23.2	386	D	34.4	464	C	22.4	355
Westbound I-80									
Northgate Blvd. Off-Ramp	F	33.7	1425	C	23.4	633	C	21.6	420
Northgate Blvd. North On-Ramp	D	28.1	212	C	21.5	265	C	20.4	184
Northgate Blvd. South On-Ramp	C	422	387	C	952	873	C	385	353
Truxel Rd. Off-Ramp	B	17.5	609	B	15.0	768	B	13.0	837
Truxel Rd. North On-Ramp	C	568	521	C	216	198	C	248	227
Truxel Rd. South On-Ramp	C	535	490	C	1017	932	C	632	579

NOTES:

- 1 LOS = Level of Service
- 2 Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.
- 3 Vol = Traffic Volume

SOURCE: Dowling Associates, Inc., 2002.

Public Services and Utilities

Police Protection Services

Rapid development in the North Natomas area will require augmentation of law enforcement facilities and services. Under the No Project Alternative the project site would not be developed. The project site would remain as undeveloped open space. Because no development would occur, this alternative would not generate demand for police services, and therefore would have no impact on law enforcement services.

Fire Protection Services

Under the No Project Alternative, the project site would not be developed. The project site would remain as undeveloped open space. Because no development would occur, there would be no need for additional fire protection services associated with structures. However, fire protection services would be needed for any grassland fires. The impact to fire services under this alternative would be less than significant.

Water Supply

Under Alternative 1 the project site would remain undeveloped. Future growth of the North Natomas area would create an increase in water demand that could necessitate construction of new

facilities and infrastructure, and possibly acquisition of additional water rights. However, because no development would occur under this alternative, there would be no need for additional water supply, additional water treatment services or infrastructure; therefore, no impact would occur.

Wastewater Treatment

Growth within the North Natomas area will result in increased demand for wastewater treatment facilities and infrastructure. Under the No Project Alternative the project site would not be developed. Because no development would occur, there would be no need for additional wastewater treatment and conveyance services and there would be no impact.

Electricity and Natural Gas

Under the No Project Alternative the project site would remain as undeveloped open space. Because no development would occur, there would be no need for additional energy services. Therefore, this alternative would result in no impact to electricity and natural gas.

Solid Waste

Under the No Project Alternative the project site would remain as undeveloped open space. Because no development would occur, there would be no need for additional solid waste handling services. Therefore, this alternative would not affect solid waste services in any way, and no impact on solid waste services would occur.

Public Health and Hazards

Under the No Project Alternative, site preparation activities such as grading and excavation would not occur and construction workers would not encounter unknown hazardous conditions. No hazardous materials other than those already being used for agricultural purposes would be used at the project site. In addition, no new buildings would be constructed. Therefore, there would be no impact.

In addition, because the No Project Alternative would not change the volume or types of hazardous materials that would be used, stored, or transported within the City of Sacramento, there would be no impact.

Hydrology and Water Quality

Under the No Project Alternative there would be no new development. In addition, because the No Project Alternative would not alter the project site's drainage character, nor involve construction or operation other than what currently occurs at the site there would be no impact.

Biological Resources

Under the No Project Alternative, construction activities would not occur, and foraging and nesting habitat for listed and non-listed special status species would not be removed, potential waters of the United States would not be filled, and there would be no loss or degradation of Giant Garter Snake

habitat. The No Project Alternative would also not affect tree resources because there would be no trees removed. Therefore, there would be no impact.

Cultural Resources

Under the No Project Alternative, no construction would occur on the project site, and there would be no impact to either archeological or historic resources.

Alternative 2: Community Plan Buildout

Under CEQA, in addition to considering the effects of retaining the existing use of the project site, a No Project Alternative must consider what actions could occur given existing plan designations for the project site.

Section 15126(d)(4) of the CEQA Guidelines requires that:

the “no project” analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

Under Alternative 2, the project site could still be developed in the future for light industrial uses consistent with the existing land use designation under the NNCP. Respective portions of the site currently designated A-PUD would require rezoning to be consistent with the Community Plan designation of EC-50 and M-1(S) consistent with the community plan (see Figure 4-1). Under this alternative a total of 399,000 sf of office uses would be developed along with 1,550,000 sf of warehouse uses. A total of 2,880 employees are anticipated.

Land Use and Planning

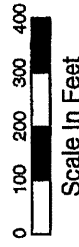
Under the Community Plan Buildout Alternative, 30.4 acres of the southwest portion of the project site would be rezoned from A-PUD to EC-50 and 96.2 acres from A-PUD to M-1(S) (light industrial) consistent with the NNCP designation of EC-50 and M-1(S). Development under this alternative would allow light-manufacturing uses to occur in a majority of the site with office, or employee intensive uses on the remaining 30 acres. Under this alternative less retail development would occur in contrast to the Proposed Project. As mentioned previously, the project site is surrounded by a mix of retail, office, and light-manufacturing uses (planned and existing); development of the project site under this alternative would include office and light industrial uses that would be an expansion of the existing office and light industrial uses located to the east and north of the project site. Therefore, this alternative would be considered compatible with the existing and planned surrounding land uses.

The Community Plan Buildout Alternative would not require a General Plan Amendment and would allow development that is already consistent with the goals and policies set forth in the General Plan.

Figure 4-1

Alternative 2

**Community
Plan Buildout**



Light Industrial
96.4 Acres

EC 50
30.4 Acres

Gateway Blvd.

Truxel Rd.

Interstate 80



----- Project Site Boundary

Socio-Economic Effects

The Community Plan Buildout Alternative would allow development that is already included in the NNCP. This alternative would require a rezone for a portion of the site to be consistent with the NNCP. The site would be developed partly as an Employment Center (portion nearest I-80 and Truxel Road) with the remainder Light Industrial, as is stipulated by the NNCP. It is not known what types of light industrial or office uses would be developed on the site under this alternative. However, it is anticipated that the types of uses would not attract retailers away from the established malls in the area resulting in a situation that could create blight. Therefore, no adverse socio-economics effects would occur.

Population, Employment and Housing

Under Alternative 2, the project site would be developed under the existing NNCP land use designations. The jobs-housing balance would be 62 percent for the NNCP area, 79 percent for the City, and 116 percent for the County. Development of the project site in accordance with the existing land use designations would conform to the jobs-housing balance established for the NNCP area. Therefore, there would be no change to the jobs-housing balance approved for the NNCP under this alternative.

Transportation and Circulation

Under the Community Plan Buildout Alternative, the project area would be developed consistent with the designations established in the NNCP. Significant impacts would occur at the following five intersections:

- Northgate Boulevard/Del Paso Road;
- North Market Boulevard/North Freeway Boulevard;
- Truxel Road/Gateway Park Boulevard; and
- Truxel Road/San Juan Road.

The am and pm peak hour baseline levels of service and Saturday peak hour baseline level of service for Alternative 2 are shown in Table 4-4.

Mitigation for intersections identified above for Alternative 2 would be the same as the Proposed Project (Mitigation Measure 7.2-1). Compliance with this mitigation would ensure impacts to intersections would be reduced to a less-than-significant level.

The baseline I-80 mainline and interchange operations for Alternative 2 are shown in Tables 4-5 and 4-6.

Under the Community Plan Buildout Alternative there would be impacts to I-80, the same as the Proposed Project. However, there are no feasible mitigation measures to address these impacts. Therefore, as with the Proposed Project, the impacts would be significant and unavoidable.

TABLE 4-4

ALTERNATIVE 2 BASELINE LEVELS OF SERVICE

Intersection	Control	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
Del Paso Rd. / Gateway Park Blvd.	Signal	C	26.6	C	25.7	C	23.8
Del Paso Rd. / National Dr.	Signal	B	13.2	B	18.3	B	12.0
Northgate Blvd. / Del Paso Rd.	4-Way Stop	D	25.2	F	59.0	B	10.5
Truxel Rd. / Arena Blvd.	Signal	C	22.7	C	31.1	C	20.0
Arena Blvd. / Gateway Park Blvd.	Signal	C	32.4	C	32.0	C	27.2
N. Market Blvd. / Sierra Point Dr.	Stop Sign	A	2.2	C	17.2	A	0.9
N. Market Blvd. / National Dr.	Signal	B	15.4	C	21.2	B	12.9
N. Market Blvd. / N. Freeway Blvd.	Stop Sign	A	4.0	D	25.6	A	2.4
N. Market Blvd. / Northgate Blvd.	Signal	C	31.7	C	27.9	B	20.0
Gateway Park Blvd. / Raley's Dr.	Stop Sign	A	0.5	A	0.6	A	1.0
Truxel Rd. / Gateway Park Blvd.	Signal	D	86.4	D	52.8	C	23.4
Lennane Dr. / N. Freeway	Stop Sign	A	0.8	A	1.0	A	0.4
Truxel Rd. / I-80 West Ramps	Signal	A	9.7	A	9.8	B	10.4
Truxel Rd. / I-80 East Ramps	Signal	B	20.0	B	15.2	B	13.2
Northgate Blvd. / I-80 West Ramps	Signal	A	9.3	A	7.1	A	7.5
Northgate Blvd. / I-80 East Ramps	Signal	B	20.0	B	14.1	B	13.7
Truxel Rd. / San Juan Rd.	Signal	D	68.2	D	36.0	C	31.7
Northgate Blvd. / San Juan Rd.	Signal	C	30.1	C	31.8	C	29.3
Gateway Park Blvd. / N. Freeway Blvd.	Signal	B	16.1	C	20.3	B	16.2

NOTES:
¹ LOS = Level of Service
² Weighted average control delay in seconds
 Shaded values indicate a potential significant impact.
 SOURCE: Dowling associates, Inc., 2002.

TABLE 4-5

ALTERNATIVE 2 BASELINE I-80 MAINLINE OPERATIONS

Location	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS ¹	V/C ²	Vol ³	LOS ¹	V/C ²	Vol ³	LOS ¹	V/C ²	Vol ³
Eastbound									
I-5 to Truxel Rd.	C	0.71	5,857	D	0.76	6,214	B	0.52	4,246
Truxel Rd. to Northgate Blvd.	C	0.59	4,815	D	0.75	6,139	B	0.51	4,205
Northgate Blvd. to Norwood Ave.	C	0.68	4,490	F	1.07	7,075	C	0.66	4,362
Westbound									
Norwood Ave. to Northgate Blvd.	F	1.07	7,089	C	0.71	4,654	C	0.65	4,294
Northgate Blvd. to Truxel Rd.	D	0.74	6,105	C	0.62	5,123	C	0.54	4,392
Truxel Rd. to I-5	C	0.65	6,356	C	0.62	6,084	B	0.45	4,417

1 LOS = Level of Service
 2 V/C = Volume / Capacity
 3 Vol = Traffic Volume
 NOTE: Shaded values indicate a potential significant impact.
 SOURCE: Dowling Associates, Inc., 2002.

Ramp	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS	d(f)	Vol	LOS	d(f)	Vol	LOS	d(f)	Vol
Eastbound I-80									
Truxel Rd. Off-Ramp	B	17.4	1742	B	18.5	1165	B	12.6	707
Truxel Rd. South On-Ramp	C	200	183	C	763	699	C	386	354
Truxel Rd. North On-Ramp	B	18.9	517	C	24.0	391	B	16.7	312
Northgate Blvd. Off-Ramp	B	14.3	1047	B	18.2	690	B	12.5	478
Northgate Blvd. South On-Ramp	C	21.3	336	F	36.6	1162	C	20.6	280
Northgate Blvd. North On-Ramp	C	23.4	386	F	37.0	464	C	22.7	355
Westbound I-80									
Northgate Blvd. Off-Ramp	F	35.3	1583	C	23.9	669	C	21.8	439
Northgate Blvd. North On-Ramp	D	29.3	212	C	21.9	265	C	20.5	184
Northgate Blvd. South On-Ramp	C	422	387	C	952	873	C	385	353
Truxel Rd. Off-Ramp	B	18.1	827	B	15.2	834	B	13.1	857
Truxel Rd. North On-Ramp	C	568	521	C	216	198	C	248	227
Truxel Rd. South On-Ramp	C	608	557	F	17.4	1597	C	715	655
1 LOS = Level of Service 2 Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp. 3 Vol = Traffic Volume NOTE: Shaded values indicate a potential significant impact. SOURCE: Dowling Associates, Inc., 2002.									

Under the Community Plan Buildout Alternative, the project area would be developed consistent with the designations established in the NNCP. This alternative would generate approximately 110 transit riders during the a.m. peak and about 160 during the p.m. peak. The p.m. peak hour demand for transit services would exceed the capacity of the transit system; therefore, this would be a significant impact. Compliance with Mitigation Measure 7.2-6 would ensure the impact would be reduced to a less-than-significant level.

Based on the daily traffic volumes, the City standard is six (6) through lanes on Gateway Park Boulevard from Truxel Road to North Freeway Boulevard. The existing roadway has four (4) lanes in this section.

No driveway access would be allowed along Truxel Road (an eight-lane roadway), nor would driveway access be allowed along Gateway Park Boulevard between Truxel Road and North Freeway Boulevard, a distance of approximately 850 feet, due to the requirement for 500-foot driveway spacing on six-lane roadways. These access restrictions are necessary to prevent potentially hazardous weaving movements across multiple lanes of heavily traveled streets.

The centerline radius on Gateway Park Boulevard between Truxel Road and North Freeway Boulevard is 1000 feet. The standard radius for this section of six-lane roadway is 1500 feet.

The traffic circulation and safety issues discussed above would constitute a significant impact under Alternative 2.

Mitigation Measure

The following mitigation measures would be required to reduce the impact to a less-than-significant level:

Six (6) through lanes on Gateway Park Boulevard shall be provided from Truxel Road to North Freeway Boulevard. Driveways shall be prohibited on Truxel Road and Gateway Park Boulevard from Truxel Road to North Freeway Boulevard.

A roadway design that satisfies the Caltrans standard for comfortable speed on horizontal curves and is acceptable to the City of Sacramento Public Works Department would mitigate this impact to a less-than-significant level. No extension of North Freeway Boulevard has been proposed. No mitigation would be required for Alternative 2 if the extension is designed in compliance with the North Natomas Street Sizing Guidelines.

A design that satisfies Caltrans requirements for horizontal curves described in the Highway Design Manual (Figure 203.2) for Gateway Park Boulevard between Truxel Road and North Freeway Boulevard shall be provided. Recognizing that it may not be practical to increase the centerline radius, a combination of superelevation and/or speed limit restrictions would be required. A superelevation rate of approximately 0.08 would accommodate the 55 mph design speed recommended in the Sacramento Street Design Guidelines for a six-lane arterial in North Natomas. Alternatively, a normal crown with 2 percent downward cross slope from the centerline would be acceptable if the speed limit were set at 40 mph. A compromise between superelevation and design speed may also be appropriate.

Air Quality

The ISC-ST3 model was used to estimate all fugitive dust construction emissions for the No Project/Community Plan Buildout Alternative, as shown in Table 4-7 it is estimated that 6.19 $\mu\text{g}/\text{m}^3$ of PM_{10} would be generated per day under this alternative. Although these emissions could be slightly reduced from what was estimated for the Proposed Project because fewer buildings would be erected and construction activities overall would be less intense. Because the amount of PM_{10} generated is less than the district threshold, this impact would be less than significant.

CONSTRUCTION EMISSIONS FOR THE NO PROJECT/COMMUNITY PLAN BUILDOUT ALTERNATIVE					
	ROC	NO	CO	PM ₁₀	SO _x
SMAQMD Thresholds		85 lbs/day		30 $\mu\text{g}/\text{m}^3$	
Existing Zoning					
Construction	35.77	505.92	3.67	6.19	39.62
Exceeds Threshold?	No	Yes	-	No	-
Source: EIP Associates. URBEMIS7G and ISC-ST3, January 2003.					

Implementation of the Community Plan Buildout Alternative, would develop the site similar to the Proposed Project and construction activities would also be similar. As indicated in Table 4-7,

construction emissions for ROG, NO_x and CO are estimated to be 35.77 lbs/day, 505.92 lbs/day, and 3.67 lbs/day, respectively. NO_x emissions would exceed the district's adopted thresholds of 85 lbs/day, resulting in a significant impact. Mitigation Measure 7.3-2 would be required. However, compliance with this mitigation measure would reduce the amount of NO_x emissions, but not to a level that is below district thresholds. Therefore, the impact would remain significant and unavoidable the same as the Proposed Project.

Operational emissions associated with the Community Plan Buildout are estimated to be approximately 173 lbs/day of ROG, 198 lbs/day of NO_x, 1,521 lbs/day of CO, and 3.36 µg/m³ of PM₁₀, as shown in Table 4-8. ROG and NO_x emissions would exceed SMAQMD's thresholds of 65 lbs/day, resulting in a significant impact.

SMAQMD Thresholds (lbs/day)	ROG 65 lbs/day	NO _x 65 lbs/day	CO	PM ₁₀ 30 µg/m ³
AB Existing Zoning				
Operational	172.61	197.48	1521.2	3.36
Exceeds Threshold?	Yes	Yes	-	No
Source: EIP Associates. URBEMIS7G and ISC-ST3, January 2003.				

Compliance with Mitigation Measure 7.3-3 would help to reduce the magnitude of the impact; however, the impact would remain significant and unavoidable the same as the Proposed Project.

There would be no impact associated with an increase in CO, the same as the Proposed Project under this alternative.

Noise

Under the Community Plan Buildout Alternative, activities associated with construction within the project area would result in elevated noise levels within the project area, with maximum noise levels as shown in Table 4-9.

Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature and would occur during normal daytime working hours. Construction activities would be required to adhere to the requirements of the City of Sacramento Noise Ordinance with respect to hours of operation, muffling of internal combustion engines, and other factors that affect construction noise generation. The nearest sensitive receptors are new residences and are a distance away from the site to the northwest. Because there are no sensitive receptors in the immediate project vicinity that would be adversely affected by construction noise, this impact is considered less than significant.

TABLE 4-9

**PREDICTED TRAFFIC NOISE LEVELS
FOR THE COMMUNITY PLAN BUILDOUT ALTERNATIVE**

Intersection	Roadways	Segment	Baseline Leq/ Ldn @ 100 ft	Change in Traffic Noise Levels Relative to Baseline (dB) Leq	
				Weekday	Saturday
1	Del Paso/Gateway	South	44	11	N/A
		North	59	1	0
		West	66	0	0
		East	65	0	0
2	Del Paso/National	South	59	0	0
		North	0	0	0
		West	64	0	0
		East	65	0	0
3	Northgate/Del Paso	South	66	0	0
		North	54	0	0
		West	65	0	0
		East	66	0	0
4	Truxel/Arena	South	65	1	0
		North	65	2	1
		West	58	1	3
		East	59	4	3
5	Arena/Gateway Park	South	64	2	2
		North	53	7	10
		West	58	4	3
		East	65	1	1
6	N. Market/Hewlett	South	60	0	0
		North	53	0	0
		West	65	1	1
		East	63	1	1
7	N. Market/National	South	62	0	0
		North	60	0	0
		West	64	1	1
		East	64	1	1
8	N. Market/N. Freeway	South	60	2	3
		North	0	0	0
		West	65	1	1
		East	66	1	1
9	N Market/Northgate	South	70	0	0
		North	67	0	0
		West	67	1	1
		East	46	0	0
10	Gateway Park/Raley's	South	64	2	2
		North	64	2	2
		West	53	0	0
		East	0	0	0
11	Truxel/Gateway Park	South	70	2	0
		North	66	1	0
		West	68	0	0
		East	64	5	3

TABLE 4-9
PREDICTED TRAFFIC NOISE LEVELS
FOR THE COMMUNITY PLAN BUILDOUT ALTERNATIVE

Intersection	Roadway	Segment	Predicted Day/ Night @ 100 ft	Change in Traffic Noise Levels Relative to Existing (dB Ldn/Leq)	
				Weekday	Saturday
12	Halcraft/N. Freeway	South	0	0	0
		North	51	0	0
		West	0	N/A	15
		East	51	7	11
13	Truxel/I-80 West Ramps	South	68	1	0
		North	69	2	0
		West	63	3	1
		East	64	0	0
14	Truxel/I-80 East Ramps	South	69	0	0
		North	69	1	0
		West	66	2	0
		East	60	0	0
15	Northgate/I-80 West Ramps	South	69	0	0
		North	70	0	0
		West	64	0	0
		East	64	0	0
16	Northgate/I-80 East Ramps	South	68	0	0
		North	69	0	0
		West	66	1	0
		East	61	0	0
17	Truxel/San Juan	South	68	0	0
		North	69	0	0
		West	66	0	0
		East	67	0	0
18	Northgate/San Juan	South	68	0	0
		North	68	0	0
		West	66	0	0
		East	66	0	0

Source: FHWA-RD-77-108 with inputs from Dowling Associates and Bollard & Brennan, Inc., 2002.

Under the Community Plan Buildout Alternative, traffic noise level increases are predicted to be 4 dB or more on 6 roadway segments on weekdays and 3 roadway segments on weekends, as indicated by Table 4-9. As indicated in Table 4-9, there would be a 4dB increase on the east segment of the Truxel/Arena intersection during weekdays. Because there are noise-sensitive uses located near this intersection, this is considered a significant impact.

Increased traffic will cause traffic noise levels to increase on the local roadway network. There is no feasible mitigation to reduce the impact. Therefore, the same as the Proposed Project, the impact would be significant and unavoidable.

Public Services and Utilities

Police Protection Services

Under the Community Plan Buildout Alternative, the project site could still be developed in the future for light industrial uses consistent with the existing land use designation under the NNCP. Respective portions of the site currently designated A-PUD would require rezoning to EC-50, consistent with the Community Plan designation of EC-50 and M-1(S). The EC-50 Land Use Designation provides primarily employment-generating uses and allows an average of 50 employees per net acre. The Light Industrial designation could result in light manufacturing, assembly, warehousing, distribution, or similar uses in the context of a business park. Similar to the Proposed Project, these uses would increase employment, but would not lead to increased population in the North Natomas area. In addition, increases in call volume associated with this alternative would not be expected to compromise response times.¹ Therefore, this impact would be considered less than significant the same as the Proposed Project.

Fire Protection Services

Although the Community Buildout Alternative would not create a new population that would result in the need for new fire protection staff or facilities, this alternative could result in large-scale development on a site that is currently undeveloped, and could result in a slightly higher emergency call volume in the event of fire or situations requiring EMT services. Response times could also be compromised by the addition of more emergency trips. However, it is not anticipated that this alternative would create a substantial increased demand for fire protection services that would compromise the current 5-minute response time or otherwise prevent the SFD from providing adequate service. This is considered a less-than-significant impact the same as the Proposed Project.

Water Supply

As shown in Table 4-10, the estimated water demand for the Community Plan Buildout Alternative is 172.5 acre-feet per year and 0.15 mgd. With an average excess water supply of 54,250 AFY, the existing City of Sacramento water rights would be adequate to accommodate this alternative. Therefore, this is considered a less-than-significant impact.

Total Square Feet	1,949,000
Total Acres	105
Total Demand (afy)	172.5
Total Demand (mgd)	0.15
<small>Notes: Where land use designation was HC/M, the Industrial water demand rate was used for a conservative estimate. Where land use designation was HC/M or Office, the higher HC/M rate (Industrial water demand rate) was used for a more conservative estimate. Source: EIP Associates, 2001.</small>	

¹ Jim Hyde, City of Sacramento Police Department, personal communication, July 17, 2002.

The same as the Proposed Project the impact associated with water treatment would be less than significant because the city has adequate water treatment infrastructure and capacity to accommodate the demands associated with this alternative.

Wastewater

Under the Community Plan Buildout Alternative, the estimated demand for wastewater is 0.21 mgd, shown in Table 4-11. The remaining capacity of approximately 209 mgd at the City's wastewater treatment facility would be adequate to accommodate wastewater treatment demand associated with this alternative. In addition, the Phase 1 trunk lines planned under the CSD-1 Master Plan would provide adequate wastewater conveyance infrastructure to meet this demand. Therefore, this is considered a less-than-significant impact.

Total Square Feet	1,949,000
Total Acres	105
Total Demand (gpd)	210,000
Total Demand (mgd)	0.21
Source: EIP Associates, 2001.	

Electricity and Natural Gas

Using SMUD's electricity demand rates for Commercial land uses, the projected electricity demand for the Community Plan Buildout Alternative would be approximately 12,547 KW/day. SMUD has indicated that it would accommodate electricity demand generated.² With regard to natural gas services, PG&E has indicated that the existing gas distribution lines and other natural gas infrastructure surrounding the project site would have adequate capacity to meet projected demands.³ Therefore, this is considered a less-than-significant impact the same as the Proposed Project.

Solid Waste

The solid waste demand for the Community Plan Buildout Alternative would be approximately 27,904 cubic yards per day (10,184,960 cubic yards per year). The Kiefer Landfill has a remaining capacity of approximately 90 million cubic yards. In addition, this solid waste generation would be subject to a minimum of 30% diversion to recycling facilities under Local Solid Waste Authority Ordinance 8. Office land uses generally divert up to 90% of solid waste and Commercial land uses

2 Gene Hoppes, Engineering Designer 4, Sacramento Municipal Utilities District, personal communication, February 5, 2002.

3 Hal Hackney, Gas Planning Engineer, PG&E, personal communication, October 16, 2002.

can divert up to 50% of solid waste.⁴ Kiefer Landfill could accommodate the solid waste demand created by this alternative. Therefore, this is considered a less-than-significant impact.

Public Health and Hazards

The Community Plan Buildout Alternative would involve various degrees of ground-disturbing activities (foundation and utilities excavations and surface grading) at the project site that could encounter unknown hazardous conditions, such as those identified for the Proposed Project. As with the Proposed Project, the unknown presence and potential discovery of unknown hazards during site preparation and construction would be considered a potentially significant impact.

Implementation of Mitigation Measure 7.6-1 would reduce the magnitude of this impact to a less-than-significant level.

Under this alternative, the same as the Proposed Project, land uses would involve some level of use or storage of hazardous materials. Compliance with federal and State hazardous materials regulations would ensure the impact would be reduced to a less-than-significant level. In addition, development proposed under this alternative would not interfere with emergency response or evacuation plans. The same as the Proposed Project, this is considered a less-than-significant impact.

Hydrology and Water Quality

According to the Preliminary Drainage Master Plan (see Appendix I in Volume II of the Promenade at Natomas/Sacramento Auto Loop DEIR), the drainage study was based on the land use layout presented in the Proposed Project (see Project Description in Promenade at Natomas/Sacramento Auto Loop DEIR). However, the storm drainage facilities presented in the Preliminary Drainage Master Plan have been configured to allow for the land use changes presented in the various alternative land uses without altering the conclusions and recommendations of the drainage study. Development phasing and/or significant changes to the development configuration would prompt additional drainage analyses; however, the drainage study was based on commercial land use over the entire area, so design flows, detention storage volume, and pumping requirements would not change, regardless of site layout. The main storm drains were configured so that moderate changes to the site development layout would not significantly affect the drainage study.⁵ Because the various site configuration of the Community Plan Alternative would not significantly change the analyses that were conducted for the Proposed Project, this impact is considered less than significant.

Implementation of the Community Plan Buildout Alternative would require grading land for roadways, building foundations, parking areas, and landscaping, the same as the Proposed Project. In addition, construction activities, such as excavation and trenching for utilities, would disturb soil. Construction site runoff, as well as dust generated from other sites, could contain soil and sediment, which could enter receiving waters and degrade water quality. Spills or leaks from heavy equipment and machinery (petroleum products and/or heavy metal), staging areas, or building sites (paints,

4 Mike Root, Waste Reduction Coordinator, City of Sacramento, personal communication, December 12, 2002.

5 Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, p.1.

solvents, and cleaning agents) could also adversely affect receiving water quality by polluting runoff. These potential impacts would generally be short-term and limited to the duration of construction.

Compliance with state and local regulations, the same as the Proposed Project, would ensure that any impacts associated with urban contaminants in stormwater runoff could be reduced to a less-than-significant level.

Project operation would create a substantial amount of impervious surfaces through the construction of building foundations, parking lots, and roadways that would collect urban pollutants. Currently, the project site is undeveloped and surface water runoff is contained on-site by low berms surrounding the project site. Upon development of the site, a drainage system would collect surface water runoff and discharge it into RD 1000's adjacent drainage system. Currently (pre-development), surface water runoff collected at the project site could contain sediment containing nutrients, naturally occurring metals and minerals, and organic matter. Upon development of the project site, activities that could increase the types and quantities of agricultural and non-naturally occurring pollutants in runoff include motor vehicle operations, landscaping maintenance, littering, careless storage and handling of materials, wildlife wastes, and pavement wear. Pollutants typically associated with urban uses, would include oil and grease, coliform bacteria, petroleum hydrocarbons (gasoline and diesel fuel), heavy metals such as lead, copper and zinc, suspended solids, and pesticides and herbicides not previously applied at the project site.

Compliance with the City of Sacramento's municipal stormwater NPDES permit and Chapter 13.16 of the Sacramento City Code would ensure, the same as the Proposed Project, that impacts associated with urban contaminants in stormwater runoff would be less than significant under this alternative.

Biological Resources

The drainage canals that are located along the western and southern boundaries of the project site may be subject to the jurisdiction of the Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. If the drainage canals fall under the jurisdiction of the Corps, any project activities that result in discharge or placement of fill material into these canals would require a wetland delineation and permit under Section 404 of the Clean Water Act.

The Community Plan Buildout Alternative proposes to construct a roadway across the canal located along the western boundary of the project site, the same as the Proposed Project. Impacts to habitats near the canal associated with construction of a roadway can be mitigated through compliance with the Natomas Basin HCP providing no fill is placed in the canal. Because there could be some disturbance to this canal, impacts to jurisdictional Waters of the United States are considered significant impacts under this alternative, the same as the Proposed Project.

Compliance with Mitigation Measure 7.8-1 would reduce impacts to a less-than-significant level.

Because there are no street trees or heritage trees located within the project site, the loss of trees or impacts to trees would be considered a less-than-significant impact, the same as the Proposed Project.

The loss of foraging habitat as well as suitable nesting habitat for the Swainson's hawk would occur, the same as the Proposed Project. In addition, the loss of foraging and nesting habitat for non-listed special-status avian species would also occur, as well as loss of habitat for the giant garter snake. This is considered a significant impact. Compliance with Mitigation Measures 7.8-3, 7.8-4, 7.8-5 would reduce impacts to foraging and nesting habitat to a less-than-significant level the same as the Proposed Project.

Cultural Resources

There are no existing structures on the project site. Construction of the Community Plan Buildout Alternative would not result in the alteration or disturbance of historic resources, so no impact would occur, the same as the Proposed Project.

No archaeological or prehistoric resources are known to exist in the project area. However, as noted under the Proposed Project, there is the potential that there could be such resources present on the project site. Compliance with Mitigation Measure 7.9-2 would ensure that impacts to any prehistoric resources would be less than significant, the same as the Proposed Project.

Alternative 3: Retail/Mixed Use

Alternative 3 includes a total maximum development of 1,363,000 of retail, office and warehouse/light manufacturing uses with a maximum total of approximately 4,879 parking spaces, as shown on Figure 4-2. Under this alternative, an additional 108,000 sf and 717 fewer parking spaces would be developed compared to the Proposed Project. Area 1 would be zoned SC – PUD and could include a maximum development of 610,000 sf of retail uses. A total of approximately 3,332 parking spaces would be provided on this portion of the site. Area 2 would also be zoned SC – PUD with a total maximum of 131,000 sf of retail uses and approximately 763 parking spaces. Area 3 would be zoned M-1(S)/Office and could include a total maximum of 615,000 sf of warehouse/light manufacturing, office, and a 7,000-sf retail pad area with a maximum of approximately 827 parking spaces.

Land Use and Planning

The Retail/Mixed Use Alternative proposes a total of 1,363,000 sf of retail, office and warehouse/light manufacturing uses compared to 1,255,000 sf of Employment Center and Regional Commercial uses in the Proposed Project. As discussed above, the project site is surrounded by a mix of retail, office, and light-manufacturing uses (planned and existing); therefore, because the uses proposed under this alternative are essentially an expansion of the existing uses, this alternative can be considered compatible with the surrounding land uses.

The Retail/Mixed Use Alternative would require a General Plan Amendment, to be consistent with the City's General Plan. In addition, similar to the Proposed Project, this alternative would require a Community Plan Amendment. The changes would require City Council approval to make this alternative consistent with the General Plan and the NNCP.

As shown on Figure 4-2, a majority of the project site would include retail uses and surface parking lots. However, because this alternative encourages the development of a mix of regional retail and office uses it appears to be considered generally consistent with the intent of the applicable goals

and policies set forth in the General Plan that encourage the development of these uses and in a location that would encourage light rail ridership.

Under this alternative, the majority of the site would be designated SC-PUD to accommodate retail uses (approximately 741,000 sf). A smaller portion would be designated EC-50 PUD with a total of 615,000 sf of warehouse/light manufacturing and office uses. Under this alternative, development of a majority of the project site with retail uses appears to not meet the NNCP's intent of locating employee-intensive uses near transit stops. The NNCP's vision pertaining to commercial development appears to not be as consistent as the Proposed Project under this alternative.

Socio-Economic Effects

The Retail/Mixed Use Alternative would still provide a considerable amount of retail and office uses. Overall, the total amount of retail development would be 10,000 square feet less than the Proposed Project. Like the Proposed Project, it is anticipated that the retail component would be similar. As discussed under the Proposed Project the introduction of these types of uses may foster some competition with other similar projects throughout the region, but it should not lead to the relocation of uses that could contribute to a physical change in the environment or the creation of blight.

Population, Employment and Housing

Under this alternative, the site would be developed with a total of 1,363,000 square feet of retail, commercial and light industrial uses. The total number of jobs to be generated by development under this alternative would be 2,152. Development of 741,000 sf of Commercial land uses would generate approximately 1,853 jobs (741,000 sf/12,000 square feet per net acre equals 61.75 developed net acres x 30 employees per acre). Development of 615,000 sf of Light Industrial land uses would generate approximately 282 jobs (615,000 sf/43,560 square feet per acre equals 14.12 acres x 20 employees per acre).

The number of jobs projected for development of the site in accordance with the existing land use designations under the NNCP would be 3,604. Development under this alternative would reduce by 1,751 the number of jobs to be generated by the project site in the NNCP estimates.

The jobs-housing balance under this alternative would be 64 percent for the NNCP area, 80 percent for the City, and 116 percent for the County. Therefore, there would be an increase in the jobs-housing balance. This indicates that fewer workers would commute into the NNCP area.

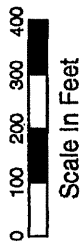
Transportation and Circulation

The Retail/Mixed Use Alternative would cause significant impacts at the same intersections as the Proposed Project (although the increases in delay would generally be less), with the following exceptions:

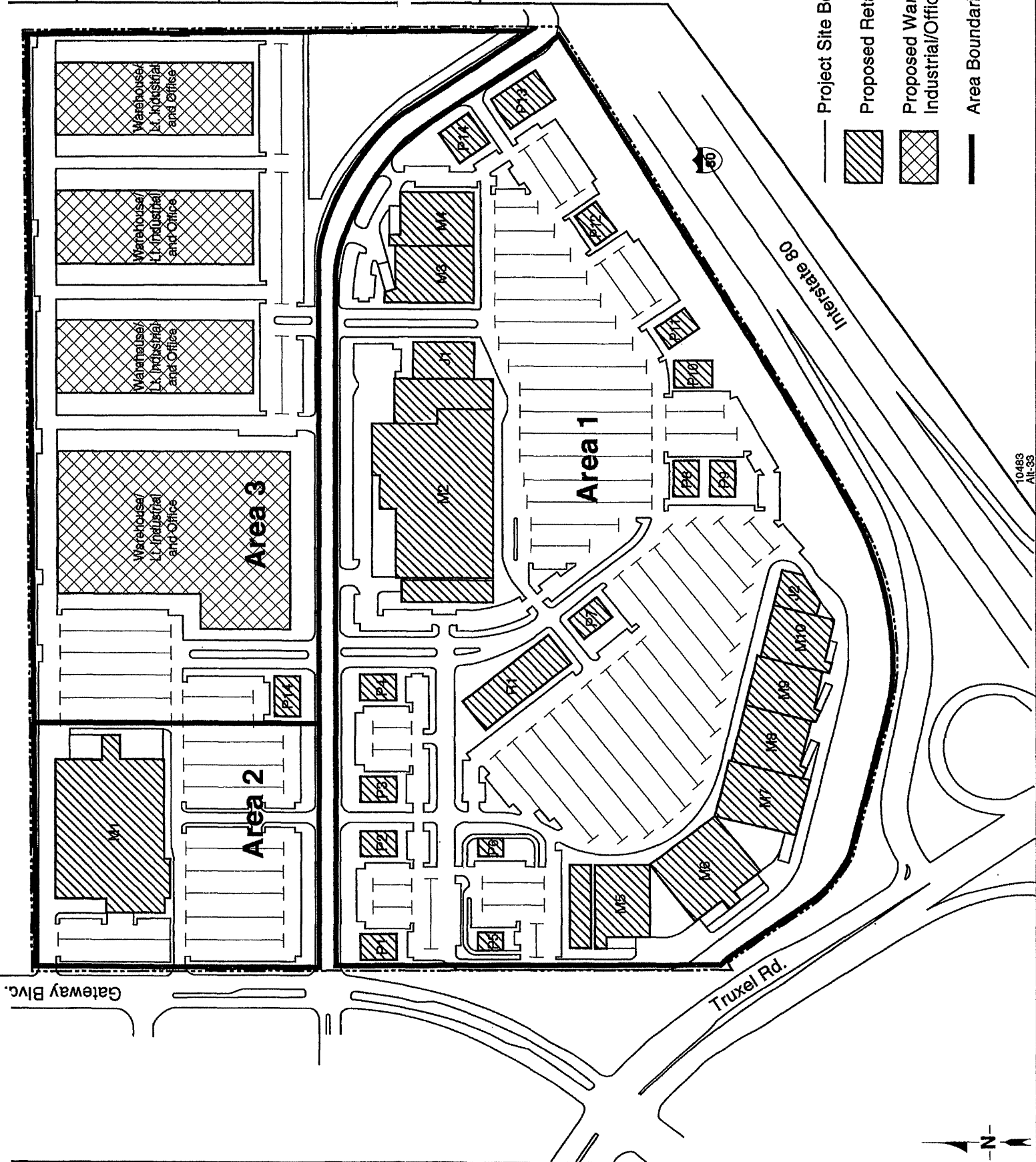
- North Market Boulevard/Northgate Boulevard intersection – traffic at this intersection would not result in a significant impact. The impact would be considered less than significant.



Figure 4-2
Alternative 3
Retail/
Mixed Use



- Project Site Boundary
- Proposed Retail
- Proposed Warehouse/Light Industrial/Office
- Area Boundaries





- Gateway Park Boulevard/North Freeway Boulevard – this new intersection would operate at LOS E during the Saturday peak hour if constructed with a configuration similar to the Proposed Project. This is considered a significant impact.

The a.m. and p.m. peak hour levels of service and Saturday peak hour levels of service for Alternative 3 are shown in Table 4-12.

Mitigation identified for intersections listed above would be the same as the Proposed Project (Mitigation Measure 7.2-1). Compliance with this mitigation would ensure impacts to intersections would be reduced to a less-than-significant level.

This alternative would cause the southbound Truxel Road merge onto westbound I-80 to operate at LOS D during the p.m. peak hour when the freeway would operate at LOS C. This is considered a significant impact. Compliance with Mitigation Measures 7.2-1 (a)-(c) and (e)-(h) would reduce impacts associated with intersections to a less-than-significant level the same as the Proposed Project.

TABLE 4-12

ALTERNATIVE 3 BASELINE LEVELS OF SERVICE

Intersection	Control	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS ¹	Delay	LOS ¹	Delay	LOS ¹	Delay
Del Paso Rd. / Gateway Park Blvd.	Signal	C	25.4	C	27.0	C	26.6
Del Paso Rd. / National Dr.	Signal	B	13.2	B	18.1	B	10.4
Northgate Blvd. / Del Paso Rd.	4-Way Stop	D	25.4	F	70.5	B	11.8
Truxel Rd. / Arena Blvd.	Signal	C	24.4	C	31.7	C	30.4
Arena Blvd. / Gateway Park Blvd.	Signal	C	30.1	D	38.8	C	30.0
N. Market Blvd. / Sierra Point Dr.	Stop Sign	A	2.2	C	17.2	A	0.9
N. Market Blvd. / National Dr.	Signal	B	16.3	C	21.2	B	12.9
N. Market Blvd. / N. Freeway Blvd.	Stop Sign	A	3.4	E	43.0	A	5.5
N. Market Blvd. / Northgate Blvd.	Signal	C	29.8	C	29.5	C	23.2
Gateway Park Blvd. / Raley's Dr.	Stop Sign	A	0.5	A	0.6	A	0.3
Truxel Rd. / Gateway Park Blvd.	Signal	C	31.6	D	44.0	E	74.1
Lennane Dr. / N. Freeway	Stop Sign	A	1.0	A	0.8	A	0.1
Truxel Rd. / I-80 West Ramps	Signal	A	9.4	B	10.0	B	10.6
Truxel Rd. / I-80 East Ramps	Signal	B	19.2	B	16.8	B	16.9
Northgate Blvd. / I-80 West Ramps	Signal	A	9.3	A	7.1	A	7.4
Northgate Blvd. / I-80 East Ramps	Signal	B	19.9	B	15.2	B	12.7
Truxel Rd. / San Juan Rd.	Signal	F	67.8	D	41.1	D	36.3
Northgate Blvd. / San Juan Rd.	Signal	C	29.9	C	32.3	C	29.5
Gateway Park Blvd. / N. Freeway Blvd.	Signal	B	16.1	C	24.9	E	64.9

NOTES:

¹ LOS = Level of Service² Weighted average control delay in seconds

Shaded values indicate a potential significant impact.

SOURCE: Dowling associates, Inc., 2002.

As shown in Tables 4-13 and 4-14, the Retail/Mixed Use Alternative would cause the same significant impacts to baseline I-80 mainline and interchange operations as the Proposed Project. This alternative would cause the southbound Truxel Road merge onto westbound I-80 to operate at LOS D during the p.m. peak hour when the freeway would operate at LOS-C. This is considered a significant impact. There are no feasible Mitigation Measures; therefore, the impact is considered significant and unavoidable the same as the Proposed Project.

The Retail/Mixed Use Alternative would generate approximately 70 transit riders during the a.m. peak and about 180 during the p.m. peak. The p.m. peak hour demand for transit services would exceed the capacity of the transit system. Therefore, this would be considered a significant impact.

The total ridership (on a weekly basis) for this alternative would be 2.8 times the ridership for the current zoning. This alternative would generate about 40 fewer riders than the current zoning during the a.m. peak hour, but would generate 52 more riders during the p.m. peak hour. Saturday ridership would increase by 214 over the current zoning.

Compliance with Mitigation Measure 7.2-6 would reduce the impact associated with transit to a less-than-significant level the same as the Proposed Project.

The proposed internal roadway design for the Retail/Mixed Use Alternative was essentially the same as Scenario B analyzed in the Promenade at Natomas/Sacramento Auto Loop DEIR. That analysis found that based on the daily traffic volumes, the Sacramento Street Design Guidelines identify a need for six (6) through lanes on Gateway Park Boulevard from Truxel Road to North Freeway Boulevard and on North Freeway Boulevard from Gateway Park Boulevard to the Main Project driveway. The site plans show four (4) lane roadways in these sections.

No driveway access would be allowed along Truxel Road (an eight-lane roadway), nor would driveway access be allowed along Gateway Park Boulevard between Truxel Road and North Freeway Boulevard, a distance of approximately 850 feet, due to the requirement for 500-foot driveway spacing on six-lane roadways. These access restrictions are necessary to prevent potentially hazardous weaving movements across multiple lanes of heavily traveled streets.

The centerline radius on Gateway Park Boulevard between Truxel Road and North Freeway Boulevard is approximately 1000 feet. The standard radius for this section of six-lane roadway is 1500 feet (based on the Sacramento Street Design Guidelines). The site plan shows a 90 degree bend (approximate 70-foot radius) on North Freeway Boulevard at the east edge of the project. The standard centerline radius for a two-lane road is 600 feet.

The site plan shows a driveway on both sides of North Freeway Boulevard between Gateway Park Boulevard and the Main Project Driveway. The driveway spacing standard along a six-lane roadway is 500 feet (based on the Sacramento Street Design Guidelines). The total distance in this section is approximately 950 feet – 1000 feet is required.

TABLE 4-13

ALTERNATIVE 3 BASELINE I-80 MAINLINE OPERATIONS

Location	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS	V/C	Vol	LOS	V/C	Vol	LOS	V/C	Vol
Eastbound									
I-5 to Truxel Rd.	C	0.69	5,617	D	0.79	6,453	C	0.59	4,802
Truxel Rd. to Northgate Blvd.	C	0.59	4,832	C	0.73	5,981	C	0.54	4,429
Northgate Blvd. to Norwood Ave.	C	0.68	4,511	C	0.65	6,024	C	0.71	4,694
Westbound									
Norwood Ave. to Northgate Blvd.	F	1.05	6,913	C	0.73	4,792	C	0.71	4,674
Northgate Blvd. to Truxel Rd.	C	0.73	5,991	C	0.63	5,204	C	0.56	4,631
Truxel Rd. to I-5	C	0.65	6,381	C	0.61	5,946	B	0.50	4,903

1 LOS = Level of Service

2 V/C = Volume / Capacity

3 Vol = Traffic Volume

NOTE: Shaded values indicate a potential significant impact.

SOURCE: Dowling Associates, Inc., 2002.

TABLE 4-14

ALTERNATIVE 3 BASELINE I-80 INTERCHANGE OPERATIONS

Ramp	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS	d(m)	Vol	LOS	d(m)	Vol	LOS	d(m)	Vol
Eastbound I-80									
Truxel Rd. Off-Ramp	B	16.7	1502	B	19.2	1404	B	14.3	1263
Truxel Rd. South On-Ramp	C	218	200	C	590	541	C	631	578
Truxel Rd. North On-Ramp	B	19.0	517	C	23.4	391	B	17.6	312
Northgate Blvd. Off-Ramp	B	14.4	1047	B	17.8	690	B	13.2	478
Northgate Blvd. South On-Ramp	C	21.4	340	F	35.8	1169	C	22.7	388
Northgate Blvd. North On-Ramp	C	23.6	386	F	36.2	464	C	24.4	355
Westbound I-80									
Northgate Blvd. Off-Ramp	F	34.6	1521	C	24.7	726	C	23.9	580
Northgate Blvd. North On-Ramp	D	28.7	212	C	22.3	265	C	21.8	184
Northgate Blvd. South On-Ramp	C	422	387	C	952	873	C	385	353
Truxel Rd. Off-Ramp	B	17.8	713	B	15.5	915	B	13.8	1096
Truxel Rd. North On-Ramp	C	568	521	C	216	198	C	248	227
Truxel Rd. South On-Ramp	C	635	582	D	592	1459	C	1245	1141

1 LOS = Level of Service

2 Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.

3 Vol = Traffic Volume

NOTE: Shaded values indicate a potential significant impact.

SOURCE: Dowling Associates, Inc., 2002.

The site plan shows a driveway on the east side of Gateway Park Boulevard slightly offset from the Raley's driveway on the west side of the street. The slight offset would result in a potential for vehicle conflicts. The design elements discussed above could result in substandard levels of safety

and would constitute a significant impact. Compliance with Mitigation Measures 7.2-7(a) through (c) would reduce impacts associated with internal roadway design to a less-than-significant level.

Air Quality

As shown in Table 4-15, under the Retail/Mixed Use Alternative, PM₁₀ emissions associated with project construction are estimated to be 6.19 µg/m³, which is less than the district thresholds of 30 µg/m³. A total of 43.56 lbs/day of ROG, 563.48 lbs/day of NO_x, and 8.36 lbs/day of CO would be generated during project construction. NO_x emissions would exceed the district's adopted thresholds of 85 lbs/day, resulting in a significant impact.

	ROG	NO _x	CO	PM ₁₀	SO ₂
SMAQMD Thresholds		85 lbs/day		30 µg/m ³	
AC Reduced Intensity					
Construction	43.56	563.48	8.36	6.19	45.13
Exceeds Threshold?	No	Yes	-	No	-
Source: EIP Associates. URBEMIS7G and ISC-ST3, January 2003.					

Emissions associated with project operation, shown in Table 4-16, indicates that operational emissions associated with the Retail/Mixed Use Alternative are estimated to be approximately 345 lbs/day of ROG, 361 lbs/day of NO_x, 3,006 lbs/day of CO, and 3.36 µg/m³ of PM₁₀. ROG and NO_x emissions would exceed SMAQMD's thresholds of 65 lbs/day, resulting in a significant impact.

	ROG	NO _x	CO	PM ₁₀
SMAQMD Thresholds (lbs/day)	65 lbs/day	65 lbs/day	-	30 µg/m ³
Reduced Intensity				
Operational	345.01	360.59	3006.03	119.74
Exceeds Threshold?	Yes	Yes	-	No
Source: EIP Associates. URBEMIS7G and ISC-ST3, January 2003.				

Mitigation Measures 7.3-2 and 7.3-3 would help to offset the creation of NO_x during project construction, and ROG and NO_x associated with project operation; however, not to a level that is below the district thresholds. Therefore, the impact associated with project construction and operation would remain significant and unavoidable, the same as the Proposed Project.

Noise

Activities associated with construction within the project area would result in elevated noise levels within the project area, with maximum noise levels as shown in Table 4-17.

Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature and would occur during normal daytime working hours. Construction activities would be required to adhere to the requirements of the City of Sacramento Noise Ordinance with respect to hours of operation, muffling of internal combustion engines, and other factors that affect construction noise generation. The nearest sensitive receptors are new residences and are a distance away from the site to the northwest. Because there are no sensitive receptors in the immediate project vicinity that would be adversely affected by construction noise, this impact is considered less than significant.

Intersection	Roadways	Segment	Baseline Leq/Ldn @ 100 ft.	Change in Traffic Noise Levels Relative to Baseline, dB Ldn/Leq	
				Weekday	Saturday
1	Del Paso/Gateway	South	44	13	N/A
		North	59	1	2
		West	66	0	0
		East	65	0	1
2	Del Paso/National	South	59	0	0
		North	0	0	0
		West	64	0	1
		East	65	0	1
3	Northgate/Del Paso	South	66	0	1
		North	54	0	0
		West	65	0	1
		East	66	0	1
4	Truxel/Arena	South	65	1	0
		North	65	2	3
		West	58	2	9
		East	59	5	12
5	Arena/Gateway Park	South	64	3	9
		North	53	8	14
		West	58	5	12
		East	65	1	1
6	N. Market/Hewlett	South	60	0	0
		North	53	0	0
		West	65	1	1
		East	63	1	1
7	N. Market/National	South	62	0	0
		North	60	0	0
		West	64	1	1
		East	64	1	1
8	N. Market/N. Freeway	South	60	3	8
		North	0	0	0

TABLE 4-17

**PREDICTED TRAFFIC NOISE LEVELS
FOR THE RETAIL/MIXED USE ALTERNATIVE**

Intersection	Roadways	Segment	Baseline Leq/Ldn @ 100 ft.	Change in Traffic Noise Levels Relative to Baseline, dB Ldn/Leq	
				Weekday	Saturday
9	N Market/Northgate	West	65	1	1
		East	66	1	4
		South	70	1	1
		North	67	0	0
		West	67	1	4
10	Gateway Park/Raley's	East	46	0	0
		South	64	3	8
		North	64	3	9
		West	53	0	0
		East	0	0	0
11	Truxel/Gateway Park	South	70	2	3
		North	66	1	2
		West	68	0	0
		East	64	5	11
12	Halcraft/N. Freeway	South	0	0	0
		North	51	0	0
		West	0	N/A	23
		East	51	9	18
13	Truxel/I-80 West Ramps	South	68	2	2
		North	69	2	3
		West	63	3	3
		East	64	1	1
14	Truxel/I-80 East Ramps	South	69	1	1
		North	69	2	2
		West	66	2	3
		East	60	0	0
15	Northgate/I-80 West Ramps	South	69	0	1
		North	70	0	1
		West	64	0	0
		East	64	1	1
16	Northgate/I-80 East Ramps	South	68	0	0
		North	69	0	1
		West	66	1	1
		East	61	0	0
17	Truxel/San Juan	South	68	0	1
		North	69	1	1
		West	66	0	1
		East	67	1	1
18	Northgate/San Juan	South	68	0	0
		North	68	0	0
		West	66	0	0
		East	66	0	0

Source: FHWA-RD-77-108 with inputs from Dowling Associates and Bollard & Brennan, Inc., 2002.

Under the Retail/Mixed Use Alternative, traffic noise level increases are predicted to be 4 dB or more on 6 roadway segments on weekdays and 13 roadway segments on weekends, as indicated by

Increased traffic generated by development of the Retail/Mixed Use Alternative will cause traffic noise levels to increase on the local roadway network. The extent by which existing land uses are affected by these increases will depend on their proximity to the roadways in question as well as their individual sensitivity to noise. No feasible noise mitigation measures are available. Therefore, the increase in traffic noise under this alternative is the same as the Proposed Project, significant and unavoidable.

Public Services and Utilities

Police Protection Services

Similar to the Proposed Project, this alternative would not result in a notable population increase in the North Natomas area, because a residential component is not included. The Sacramento Police Department would provide service to the project from the North Station. No new officers would be necessary in order to maintain the NNCP's 1.6/1,000 officer-to-population ratio because there would be no increase in population. In addition, increases in call volume associated with the project would not compromise response times.⁶ This is considered a less-than-significant impact.

Fire Protection Services

The Retail/Mixed Use Alternative would not create a new population that would result in the need for new fire protection staff or facilities. Development would result in a large-scale project on a site that is currently undeveloped, and could result in a slightly higher emergency call volume in the event of fire or situations requiring EMT services. Response times could also be compromised by the addition of more emergency trips. However, it is not anticipated that the Retail/Mixed Use Alternative would create a substantial increase in demand for fire protection services that would compromise the current 5-minute response time or otherwise prevent the SFD from providing adequate service. This is considered a less-than-significant impact the same as the Proposed Project.

Water Supply

The Retail/Mixed Use Alternative would result in a water demand of 345 AFY, shown in Table 4-18. With an average excess water supply of 54,250 AFY, the existing City of Sacramento water rights would be adequate to accommodate this alternative. In addition, the Sacramento River Water Treatment Plant and the E.A. Fairbairn Water Treatment Plant have reliable capacities of 110 mgd and 90 mgd, respectively, for a total reliable water treatment capacity of 200 mgd. In addition, a 100-mgd expansion to the Fairbairn Water Treatment Plant and a 50-mgd expansion of the Sacramento River Treatment Plant are currently under construction.⁷ This water treatment infrastructure would be adequate to accommodate this alternative. Therefore, impacts to water supply and treatment would be less than significant.

6 Jim Hyde, City of Sacramento Police Department, personal communication, July 17, 2002.

7 Kathy Mullen, Water and Sewer Superintendent, City of Sacramento Department of Utilities, personal communication, March 1, 2001.

TABLE 4-18	
RETAIL/MIXED USE ALTERNATIVE WATER DEMAND	
Total Square Feet	1,363,000
Total Acres	105
Total Demand (afy)	345
Total Demand (mgd)	0.305
Notes: Where land use designation was HC/M, the Industrial water demand rate was used for a conservative estimate. Where land use designation was HC/M or Office, the higher HC/M rate (Industrial water demand rate) was used for a more conservative estimate. Source: EIP Associates, 2001.	

Wastewater

As shown in Table 4-19, the Retail/Mixed Use Alternative would result in a demand of 0.21 mgd. The remaining capacity of approximately 209 mgd at the wastewater treatment facility would be adequate to accommodate wastewater treatment. In addition, the Phase 1 trunk lines planned under the CSD-1 Master Plan would provide adequate wastewater conveyance infrastructure to meet this demand. This is considered a less-than-significant impact.

TABLE 4-19	
RETAIL/MIXED USE ALTERNATIVE WASTEWATER DEMAND	
Total Square Feet	1,363,000
Total Acres	105
Total Demand (gpd)	210,000
Total Demand (mgd)	0.21
Source: EIP Associates, 2001.	

Electricity and Natural Gas

Using SMUD's electricity demand rates for Commercial land uses, the projected electricity demand for the Retail/Mixed Use Alternative would be approximately 12,058 KW/day. SMUD has indicated that it would accommodate electricity demand created.⁸ With regard to natural gas services, PG&E has indicated that the existing gas distribution lines and other natural gas infrastructure surrounding the project site would have adequate capacity to meet projected demands.⁹ This is considered a less-than-significant impact.

8 Gene Hoppes, Engineering Designer 4, Sacramento Municipal Utilities District, personal communication, February 5, 2002.

9 Hal Hackney, Gas Planning Engineer, PG&E, personal communication, October 16, 2002.

Solid Waste

The solid waste demand for the Retail/Mixed Use Alternative would be approximately 20,466 cubic yards per day (7,470,090 cubic yards per year). The Kiefer Boulevard Landfill had a remaining capacity of approximately 90 million cubic yards. In addition, this solid waste generation would be subject to a minimum of 30% diversion to recycling facilities under Local Solid Waste Authority Ordinance 8. Office land uses generally divert up to 90% of solid waste and Commercial land uses can divert up to 50% of solid waste.¹⁰ The demand for solid waste facilities could be accommodated by the Kiefer Landfill, near capacity. This would be a less-than-significant impact.

Public Health and Hazards

The Retail/Mixed Use Alternative would involve various degrees of ground-disturbing activities (foundation and utilities excavations and surface grading) at the project site that could encounter unknown hazardous conditions, such as those identified for the Proposed Project. In addition, hazardous materials would be used during project construction. This alternative would have similar degrees of grading to prepare the site, but the alternatives with fewer structures would generally have less of a need for excavation for building foundations and infrastructure. In any case, as with the Proposed Project, the unknown presence and potential discovery of unknown hazards during site preparation and construction would be considered a potentially significant impact. Compliance with Mitigation Measure 7.6-1, as well as state and local requirements would reduce the magnitude of the impact to a less than significant level, the same as the Proposed Project.

Nearly all of the land uses proposed, would involve some level of use or storage of hazardous materials. In each case, the potential hazards would depend on what materials would be used, where the materials would be used, how they would be used, and who would use them. Retail and office-based businesses, such as those proposed for the project site, would generally use relatively small quantities of household-related hazardous materials when compared to other businesses, such as those engaged in manufacturing, research and development, light manufacturing, or automotive repair (service stations).

Although individual businesses use relatively small volumes of hazardous materials, the total volume of the hazardous materials managed by all of the businesses at the project site could be substantial, which would increase the opportunities for accidents and improper use, storage, and disposal. Because many hazardous materials are consumed through their use (i.e., fuel, paint, aerosols), the quantity of hazardous materials handled and stored would be greater than the volume of hazardous waste generated. In any case, the SCEMD has a hazardous waste collection program that safely collects, transports, and disposes of residual hazardous wastes, and commercial products are labeled to inform users of potential risks and to instruct users in appropriate handling procedures. The use of common hazardous materials is typically considered to pose an acceptable level of risk. The use of relatively small quantities of common hazardous materials by businesses would not create substantial public health hazards and the impact would be less than significant.

¹⁰ Mike Root, Waste Reduction Coordinator, City of Sacramento, personal communication, December 12, 2002.

Hydrology and Water Quality

According to the Preliminary Drainage Master Plan, the drainage study was based on the land use layout presented in the Proposed Project (see Appendix I in Volume II of the Promenade at Natomas/Sacramento Auto Loop DEIR). However, the storm drainage facilities presented in the Preliminary Drainage Master Plan have been configured to allow for the land use changes presented in the various alternative land uses without altering the conclusions and recommendations of the drainage study. Development phasing and/or significant changes to the development configuration would prompt additional drainage analyses; however, the drainage study was based on commercial land use over the entire area, so design flows, detention storage volume, and pumping requirements would not change, regardless of site layout. The main storm drains were configured so that moderate changes to the site development layout would not significantly affect the drainage study.¹¹ Because the various site configurations of the Reduced Density Alternative would not significantly change the analyses that was conducted for the Proposed Project, this impact is considered to be less than significant.

Development of the project site would require grading land for roadways, building foundations, parking areas, and landscaping. In addition, construction activities, such as excavation and trenching for utilities, would disturb soil. Construction site runoff, as well as dust generated from other sites, could contain soil and sediment, which could enter receiving waters and degrade water quality. Spills or leaks from heavy equipment and machinery (petroleum products and/or heavy metal), staging areas, or building sites (paints, solvents, and cleaning agents) could also adversely affect receiving water quality by polluting runoff. These potential impacts would generally be short-term and limited to the duration of construction.

Prior to the initiation of site disturbing or construction activities at the project site, the project applicant would be required to obtain a General Construction Activity Stormwater Permit from the CVRWQCB. If groundwater were encountered during construction, the project applicant would be required to obtain and comply with the waste discharge requirements of the Central Valley RWQCB's General Order for Dewatering and Other Low-Threat Discharges to Surface Waters. The dewatering permit specifies standards for testing, monitoring, and reporting receiving water limitations and discharge prohibitions. A grading permit from the City of Sacramento would also be required.

Implementation of the Retail/Mixed Use Alternative would create a substantial amount of impervious surfaces through the construction of building foundations, parking lots, and roadways that would collect urban pollutants. Currently, the project site is undeveloped and surface water runoff is contained on-site by low berms surrounding the project site. Upon development of the site, a drainage system would collect surface water runoff and discharge it into RD 1000's adjacent drainage system. Currently (pre-development), surface water runoff collected at the project site could contain sediment containing nutrients, naturally occurring metals and minerals, and organic matter. Upon development of the project site, activities that could increase the types and quantities of agricultural and non-naturally occurring pollutants in runoff include motor vehicle operations, landscaping maintenance, littering, careless storage and handling of materials, wildlife wastes, and pavement wear. Pollutants typically associated with urban uses, such as those that could be

11 Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, p.1.

developed as a result of this alternative, would include oil and grease, coliform bacteria, petroleum hydrocarbons (gasoline and diesel fuel), heavy metals such as lead, copper and zinc, suspended solids, and pesticides and herbicides not previously applied at the project site.

Compliance with the City of Sacramento's municipal stormwater NPDES permit and Chapter 13.16 of the Sacramento City Code would ensure, the same as the Proposed Project, that impacts associated with urban contaminants in stormwater runoff would be less than significant under this alternative.

Biological Resources

Under Alternative 3, the drainage canals that are located along the western and southern boundaries of the project site may be subject to the jurisdiction of the Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. If the drainage canals fall under the jurisdiction of the Corps, any project activities that result in the discharge or placement of fill material into these canals would require a wetland delineation and permit under Section 404 of the Clean Water Act. A roadway is proposed across the canal located along the western boundary of the project site. Impacts to habitats near the canal associated with construction of a roadway can be mitigated through compliance with the Natomas Basin HCP providing no fill is placed in the canal. However, if placing a culvert or support structure in the canal were required to construct the roadway, a wetland delineation and permit would be required. These standards also apply to any construction activities that could impact the drainage canals located along the southern boundaries of the project site. Impacts to jurisdictional Waters of the United States are considered significant impacts. Compliance with Mitigation Measure 7.8-1 would reduce impacts to waters of the U.S. to a less-than-significant level.

There are no trees located within the project site. Implementation of this alternative could impact trees adjacent to the site through removal or trimming, and/or grading and excavation near the tree's root systems. Any work performed near street trees would be conducted in accordance with the City's tree ordinance. Because no trees are present on the site and any work would be conducted in compliance with the City's tree ordinance, this is considered a less-than-significant impact.

The Swainson's hawk nests primarily within riparian corridors in the Central Valley. The trees that are located immediately adjacent to the western boundary of the project site could provide suitable nesting habitat for the Swainson's hawk. The project site mainly consists of a fallow field, and as such provides suitable foraging habitat for the Swainson's hawk, because this species typically forages for insects and small rodents in grasslands, fallow fields, livestock pastures, and low-growing croplands.

The loss of foraging habitat, as well as suitable nesting habitat for the Swainson's hawk would occur, the same as the Proposed Project. In addition, the loss of foraging and nesting habitat for non-listed special-status avian species would also occur, as well as loss of habitat for the giant garter snake. This is considered a significant impact. Compliance with Mitigation Measures 7.8-3, 7.8-4, 7.8-5 would reduce impacts to foraging and nesting habitat to a less-than-significant level.

Cultural Resources

There are no existing structures on the project site. Construction of the Retail/Mixed Use Alternative would not result in the alteration or disturbance of historic resources, so no impact would occur.

No archaeological or prehistoric resources are known to exist in the project area. However, there is the potential that a subsurface archaeological or prehistoric resource is present within a project area. This is considered a potentially significant impact. Compliance with Mitigation Measure 7.9-2 would reduce the magnitude of this impact to a less-than-significant level.

Alternative 4: Offsite - Reed Avenue

CEQA requires that an Offsite Alternative be analyzed only if any of the significant effects of the project would be avoided or substantially lessened by locating the project elsewhere. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (CEQA Guidelines section 15126.6(2)).

Alternative 4 is a 92-acre site located in West Sacramento east of Interstate 80 (I-80) (See Figure 4-3). The site is bounded by I-80 to the west, Harbor Boulevard to the east, and Reed Avenue to the north. Uses on the site would be the same as Development Scenario B analyzed in the Promenade at Natomas/Sacramento Auto Loop DEIR and would include approximately 750,000 sf of retail uses, 762,500 sf of office uses, and a total of 7,034 parking spaces (4,934 in surface parking and 2,100 spaces in a 3-level parking structure).

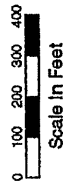
The project site consists of undeveloped fields, a drainage canal, and several mature trees. The majority of the project site consists of an open field, which is mostly barren but supports a few stands of trees. There are several mature trees and shrubs that are growing along the southern boundary of the project site on the north side of the UPRR tracks. In addition, there is one drainage canal along the southern boundary of the project site. There are no sensitive receptors located within the project site. Surrounding land uses include highway commercial businesses that include fast food restaurants and gas stations. There are no residential homes located within a half mile of the project site.



The Offsite (Reed Avenue) Alternative site is located in West Sacramento and is surrounded by arterial streets and I-80. Under this alternative, the same project would be developed as discussed under Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR except in a different location. This site is zoned and designated for General Commercial uses under the West Sacramento General Plan. The surrounding land uses are generally light industrial and commercial in nature, which would be compatible with this sort of development.

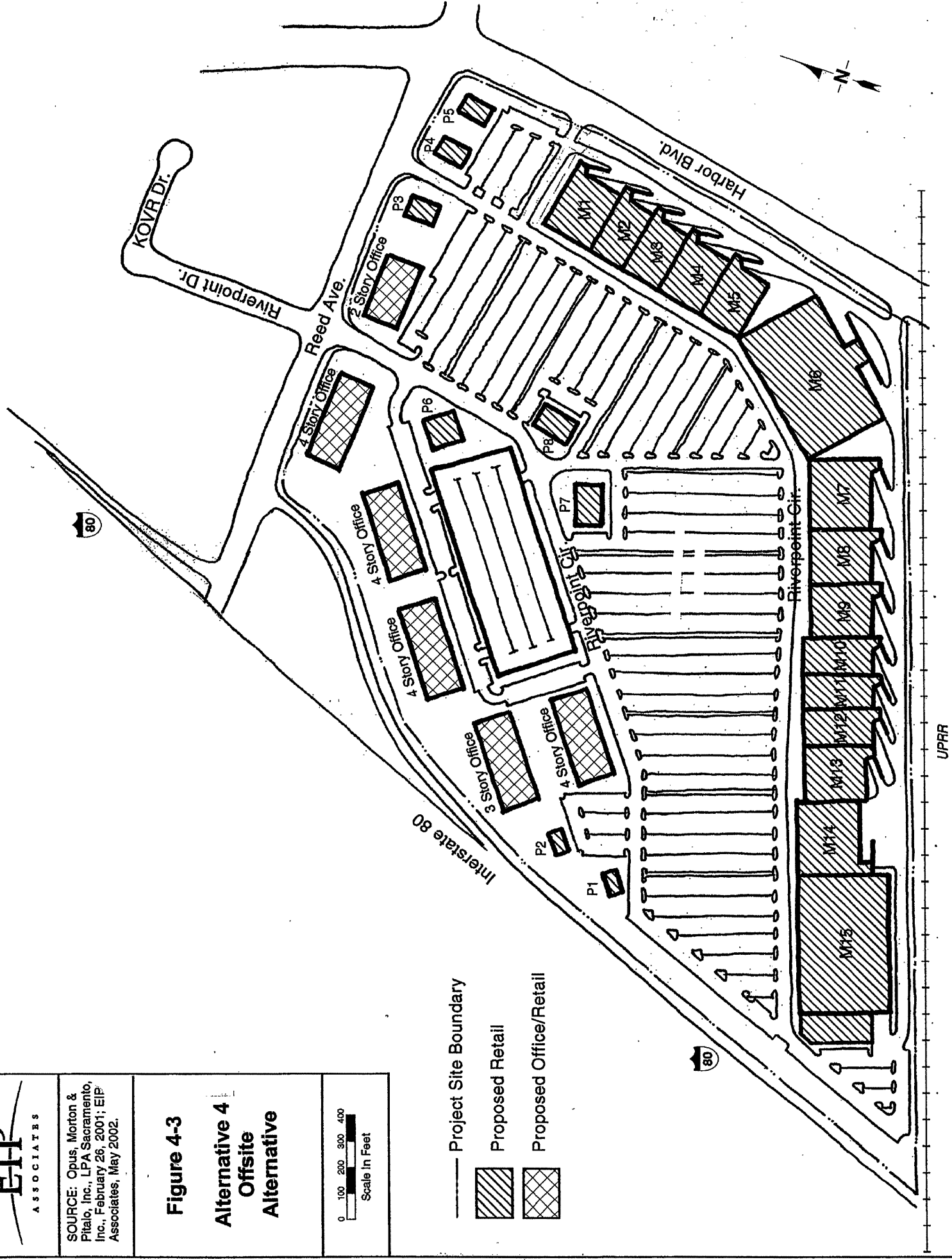
The Offsite-Reed Avenue Alternative is located within the City of West Sacramento's jurisdiction and would be required to be consistent with the City of West Sacramento's current land use and zoning designation of General Commercial. No inconsistencies with the West Sacramento General Plan would occur. The 15 parcels that would be aggregated for this alternative are all zoned for General Commercial (C-3) under the City of West Sacramento General Plan. The commercial uses

SOURCE: Opus, Morton & Pitale, Inc., LPA Sacramento, Inc., February 26, 2001; EIP Associates, May 2002.

Figure 4-3
Alternative 4
Offsite
Alternative



- Project Site Boundary
-  Proposed Retail
-  Proposed Office/Retail



UPPER

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

proposed under this alternative would not require any rezoning or other entitlements. The City of West Sacramento may require a re-zone or conditional use permit for the office commercial space that is proposed.

Socio-Economic Effects

Offsite Alternative proposes the same amount of office and retail space than what was proposed under Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR. This alternative includes a combination of “big box” retail, small pad retail, and commercial/office uses. Due to the proximity to Downtown Sacramento, this alternative would be more likely to impact the Downtown Sacramento retail market than the Arden Fair Mall area or the Roseville Galleria. However, because the type of retail uses proposed would be similar to the project it is not anticipated that development of the project in this area would have the same effect on the regional retail market.

This alternative proposes the same land uses as Scenario B, but on fewer acres than the 126.4 acre project site. It is not known how development of a regional retail center in this area of West Sacramento could compete with other proposed retail developments in the city affecting their viability. Due to the proximity to Downtown Sacramento and road infrastructure, this alternative would be more likely to impact Downtown Sacramento than the North Natomas region.

Population, Employment and Housing

Project development under the Offsite Alternative would have no effect on the jobs-housing balance within the NNCP area because it is located in West Sacramento. It is assumed under this alternative that the Proposed Project site at Truxel Road and Gateway Boulevard in Sacramento would be developed in accordance with its current zoning.

Transportation and Circulation

The Offsite Alternative would generate essentially the same number of peak hour trips as what was assumed under Scenario B analyzed in the Promenade at Natomas/Sacramento Auto Loop DEIR. The project, however, would be located in West Sacramento. As with Scenario B, significant impacts are expected to occur at intersections and freeways, although the locations of the impacts have not been identified.

A similar number of employees, visitors, and shopping patrons would be generated under this alternative as Scenario B. The project, however, would be located in West Sacramento. This alternative is not anticipated to result in unsafe conditions for bicyclists or pedestrians. Sidewalks would be required along all new roadway construction in the project vicinity in conformance with City design standards. This alternative is not anticipated to result in unsafe conditions for bicyclists or pedestrians, including unsafe bicycle/pedestrian or pedestrian/motor vehicle conflicts or bicycle/pedestrian or bicycle/motor vehicle conflicts, nor would it be expected to interfere with implementation of proposed bikeways because no bikeways are proposed in the vicinity of the site. Therefore, pedestrian circulation and bicycle impacts would be less than significant.

The Offsite Alternative would generate approximately 100 transit riders during the a.m. peak and about 210 during the p.m. peak. No quantitative analysis of transit impacts was performed for this alternative; however, due to the size of the project and the high number of transit riders that would

**TABLE 4-22
PREDICTED TRAFFIC NOISE LEVELS FOR THE OFFSITE ALTERNATIVE**

Alternative	Direction	Distance (ft)	Day	Night	Weekend
6	North	53	7	13	11
	West	58	6	11	1
6	East	65	1	1	1
	South	60	0	0	0
6	North	53	0	0	0
	West	64	1	1	1
7	East	63	1	1	1
	South	62	0	0	0
7	North	60	4	9	8
	West	64	1	1	1
8	East	64	1	1	1
	South	60	4	9	8
9	North	67	0	1	1
	West	67	1	4	4
9	East	70	1	2	2
	South	70	2	2	2
10	North	64	3	7	7
	South	64	3	7	7
10	East	46	0	0	0
	West	46	0	0	0
11	North	66	1	1	1
	South	66	1	1	1
11	East	0	0	0	0
	West	53	0	0	0
11	North	70	2	2	2
	South	70	2	2	2
12	East	64	6	10	10
	West	68	0	0	0
12	North	51	0	0	0
	South	51	0	0	0
13	East	68	2	2	2
	West	68	2	2	2
13	North	69	2	2	2
	South	69	2	2	2
14	East	66	2	2	2
	West	66	2	2	2
14	North	69	1	1	1
	South	69	1	1	1
15	East	60	0	0	0
	West	60	0	0	0
15	North	70	1	1	1
	South	70	1	1	1
16	East	64	1	1	1
	West	64	1	1	1
16	North	68	0	0	0
	South	68	0	0	0
16	East	69	1	1	1
	West	69	1	1	1

Implementation of the following mitigation measure would reduce the magnitude of this impact to a less-than-significant level.¹³ However, because this alternative is located outside the jurisdiction of the City of Sacramento, the City would not be able to enforce the mitigation measure. Therefore, this impact is considered significant and unavoidable.

Mitigation Measure

The project applicant shall contribute an impact fee to the West Sacramento Police Department, in order to offset impacts on police services (i.e., staffing and response times).

Fire Protection Services

Alternative 4 would be served by the West Sacramento Fire Department (WSFD). The WSFD would provide service to the alternative primarily from Station 44, located at 905 Fremont Street.¹⁴

Although this alternative would not create a new population that would result in the need for new fire protection staff or facilities, development of this alternative could result in large-scale development on a site that is currently undeveloped, and could result in a slightly higher emergency call volume in the event of fire or situations requiring EMT services. Response times could also be compromised by the addition of more emergency trips. Rapid growth in the area is already taxing fire protection services. Therefore, this is considered a potentially significant impact.

The following mitigation measure would reduce this impact to a less-than-significant level by providing for enhanced fire protection services. However, because this alternative is located outside the jurisdiction of the City of Sacramento, the City would not be able to enforce the mitigation measure. Therefore, this impact is considered significant and unavoidable.

Mitigation Measure

The developer shall pay a fair share mitigation fee to the City of West Sacramento in order to offset the cost of fire protection improvements necessary to serve the proposed Alternative.

Water Supply

Alternative 4 would be constructed in the City of West Sacramento and would be served by the West Sacramento Water Treatment Plant (WSWTP). The existing WSWTP has a design capacity of 24 mgd, with current average handling of 10 mgd, and peak handling of 20 mgd. An expansion project began in 2001 to increase the WSWTP's capacity to 40 mgd. This expansion is expected to be complete in 2004.¹⁵

The City of West Sacramento's main water source is the Sacramento River. The City's water intake structure is located at Bryte Bend, upstream of the confluence of the Sacramento and American rivers. The City maintains water supply contracts with the federal Bureau of Reclamation, the state

13 Penny Misselli, Administrative Analyst, West Sacramento Police Department, personal communication, July 17, 2002.

14 Summer Moore, Senior clerk, West Sacramento Fire Department, personal communication, April 18, 2002.

15 Dan Mount, Water Services Superintendent, personal communication, April 18, 2002.

Division. As with the Proposed Project, the use of those materials would be highly regulated by numerous federal, State, and local laws and regulations, making this impact less than significant.

The roadway system in Alternative 4 would be designed, per City of West Sacramento General Plan requirements, to complement the flow of surrounding traffic, and would, therefore, not interfere with an evacuation or emergency response route. This impact is considered to be less than significant, the same as the Proposed Project.

Hydrology and Water Quality

Storm drainage facilities operated and maintained by the City of West Sacramento consist of buried pipelines, street gutters, roadside ditches, and pump stations. The collection facilities carry runoff to large-capacity channels and pipelines belonging to various reclamation districts. Yolo County has developed hydrology and criteria for use in the design of storm drainage facilities that the City of West Sacramento references.²⁴

The Offsite Alternative site is located in Shed A, one of eight drainage sheds established for the purposes of drainage analyses associated with development anticipated under the 1990 City of West Sacramento General Plan. Shed A discharges runoff to a long earthen channel that serves both as a conveyance and storage facility operated by RD 537. Drainage is pumped from the storage basin to the Yolo Bypass via a pump station that is maintained jointly by RD 537 and RD 811. The pumping facility includes five pumps with capacities ranging from 65 to 90 cfs. Maintenance and operating costs are charged to property owners within the district. In RD 537, master planning for development projects (e.g., Rose Orchard and California Highway Patrol Academy) has been limited to major facilities improvements.^{25,26}

Under the West Sacramento General Plan, Shed A is designated for a mixture of commercial, industrial, and public and quasi-public uses. Only a small portion of Shed A is currently developed. Runoff associated with planned uses in Shed A, along with other drainage areas that are primarily undeveloped, is anticipated to increase substantially. The General Plan includes policies that address drainage infrastructure improvements. The General Plan EIR concluded that development would not adversely affect drainage in West Sacramento. The General Plan EIR notes that the *Major Projects Financing Analysis* identifies drainage improvements needed to serve projected development, and adequate financing for all necessary improvements could be reasonably assumed through a combination of sources and techniques.²⁷

The Preliminary Drainage Master Plan prepared for the Proposed Project considered the various on-site land-use alternatives, but did not consider the Offsite Alternative. The Offsite Alternative was not evaluated because it is within another drainage watershed not connected to RD 1000 facilities. Therefore, the drainage calculations and the infrastructure sizing specific to the Proposed Project would not be applicable to the site on Reed Avenue. In addition, the Preliminary Drainage Master Plan used computer modeling specific to the City of Sacramento and North Natomas. The City of West Sacramento relies on Yolo County hydrology and criteria for calculating stormwater runoff

24 City of West Sacramento, General Plan Background Report, June 2000, pp.VI-13 to VI-17.

25 City of West Sacramento, General Plan Background Report, June 2000, pp.VI-13 to VI-17.

26 City of West Sacramento, General Plan Final Environmental Impact Report, May 1990, pp. V-10 to V-13.

27 City of West Sacramento, General Plan Final Environmental Impact Report, May 1990, pp. V-10 to V-13.

conditions and system design. Therefore, in the absence of a Preliminary Drainage Master Plan specific to this alternative site to ensure that on- or off-site flooding would not occur, this impact is considered to be potentially significant.

However, because the Offsite Alternative, was not considered in the Proposed Project's Preliminary Drainage Master Plan, development could increase the potential for on- and off-site flooding, and could exceed the capacity of existing drainage systems. The following mitigation measure would reduce the impact to a less-than-significant level through preparation of a Preliminary Drainage Master Plan in accordance with stormwater requirements set forth by the City of West Sacramento. However, if this alternative were selected the City of Sacramento cannot guarantee that compliance with this mitigation measure would occur because it is under the jurisdiction of the City of West Sacramento. Therefore, the impact would remain significant and unavoidable.

Mitigation Measure

A Preliminary Drainage Master Plan for the Reed Avenue site shall be prepared in accordance with the stormwater drainage requirements of the City of West Sacramento. The drainage plan shall ensure that project runoff does not exceed existing or planned capacity of West Sacramento Drainage Facilities or RD 537 facilities.

Under the Offsite Alternative, site construction would be subject to the same federal and State water quality protection requirements as the Proposed Project. The City of West Sacramento is in the process of developing its NPDES Phase 2 stormwater quality program, which must be in place by March 2003. The requirements established in the program for BMPs would apply to this alternative. Because development of this alternative would be required to protect water quality through the relevant provisions of the construction and operation required NPDES permits, this impact is considered to be less than significant.

Biological Resources

A drainage canal is located along the southern boundary of the Offsite Alternative project site. The same as the Proposed Project, this drainage canal may be subject to the jurisdiction of the Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. If the drainage canals fall under the jurisdiction of the Corps, any project activities that result in discharge or placement of fill material into these canals would require a wetland delineation and permit under Section 404 of the Clean Water Act.

At this time it is not known if a roadway would need to be located across the drainage canal; however, if a roadway would be required it is assumed the city of West Sacramento would comply with required federal and State requirements. Compliance with Mitigation Measure 7.8-1 would reduce the impact to a less-than-significant level, the same as the Proposed Project.

There are several mature trees that are growing along the southern boundary of the project site for Alternative 4 that may meet the City of West Sacramento's definition of a street tree or heritage tree. Implementation of the Offsite Alternative could impact trees through removal or trimming, and/or grading and excavation near the tree's root systems. Any work performed near street trees or heritage trees would be conducted in accordance with the City's tree ordinance. This is considered a significant impact.

The giant garter (GGS) snake is listed as a threatened species by CDFG and the USFWS and is protected under the provisions of the California and Federal Endangered Species Acts. This species is a highly aquatic snake, relying upon aquatic environments both for food and for shelter and escape from predators. The drainage canals and adjacent upland vegetation along the western and southern boundaries of the project site, as well as the drainage canal along the southern boundary of Alternative 4 provide marginally suitable habitat for GGS. The patches of vegetation along the margins of the canals provide adequate hibernation habitat and the banks of the canals provide suitable locations for basking. The USFWS typically considers all upland areas within 200 feet of aquatic giant garter snake habitat to be upland habitat for GGS. Implementation of the Offsite Alternative could result in the removal of suitable GGS aestivation habitat, which, in turn, could result in the incidental direct take of GGS (mechanical injury) and indirect take through habitat loss. Danger posed by construction activities is greatest during the winter dormant period (November through March) when these snakes are inactive below the ground and are unable to flee machinery. Loss of suitable habitat for the GGS and potential take of this species is considered to be a significant impact.

Since Alternative 4 is not within the boundaries of the Natomas Basin HCP, and implementation of the following mitigation measures could not be guaranteed because the project is located in another jurisdiction, the impact would be significant and unavoidable.

Mitigation Measure

- (b) *The project applicant shall re-design the Offsite Alternative to avoid any disturbance within 200 feet of the drainage canal/bank located along the southern boundary of the site.*

OR

- (c) *The project applicant shall coordinate with the USFWS and CDFG to obtain the appropriate permits (Section 7 Incidental Take Permit). The project applicant shall, at a minimum, mitigate with offsite creation, rehabilitation, or preservation of GGS habitat at a 3:1 ratio. The project applicant shall ensure that construction activities shall be limited to the active period for GGS (April through July) to facilitate detection. Two weeks prior to any ground-disturbing activity, the project applicant and/or the developer shall retain a qualified biologist to identify GGS habitat and to fence off (using snake-proof fencing) a 30-foot wide buffer corridor. Two days prior to construction, a biological monitor with appropriate State and federal permits shall survey the corridor and relocate any snakes beyond the fenced area. During project construction, the biological monitor shall remain on-site to ensure that no snakes are located in the disturbance area.*

Cultural Resources

The Offsite Alternative consists of mostly undeveloped land, with the freeway (I-80) ramps at the northwest corner of the site. The site includes one roadway (Riverpoint Circle) and one developed parcel adjacent to Reed Avenue. The buildings on the parcel include two gas stations and a fast-food establishment. These buildings are recently constructed and are not historically significant. There are no other structures on the site. Therefore, implementation of this alternative would not result in the alteration or disturbance of historic resources, so no impact would occur.

The Offsite Alternative location on Reed Avenue has not been field inspected. This site is located much nearer to the Sacramento River than the Proposed Project area. The immediate vicinity of the Sacramento and American Rivers is the most archeologically sensitive zone in the Sacramento area. The potential for locating a significant cultural resource in the Reed Avenue area is significantly higher than the Proposed Project area. Impacts could occur to previously unidentified significant resources, and subsurface archaeological artifacts could be damaged or destroyed during project construction. This is considered a potentially significant impact.

Implementation of Mitigation Measure 7.9-3 would reduce the magnitude of this impact to a less-than-significant level. However, if Alternative 4 were selected the City of Sacramento could not compel the City of West Sacramento to comply with this mitigation measure. Therefore, the impact would be significant and unavoidable

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6(e) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states that “if the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.”

Generally, the environmentally superior alternative is the one that would cause the fewest or least severe unmitigable impacts. The impacts of the Proposed Project and the alternatives are summarized in Table 4-23. The No Project Alternative would be environmentally superior to the Proposed Project and Alternatives 2 and 3, because it would not alter conditions on the project site. The loss of biological resources would not occur, and there would be little, if any, increase in traffic, air emissions, or noise. As discussed previously, the No Project Alternative would not be consistent with the City’s General Plan or the NNCP, which provides for development of the project site, and would not meet any of the project objectives. Further, it is possible that this alternative could create pressure for growth to occur elsewhere in the NNCP or the city, with similar or even greater impacts than would result from the Proposed Project.

After the No Project Alternative, Alternative 2, the Community Plan Buildout Alternative, would be considered the environmentally superior alternative. Alternative 2 would convert the entire project site to developed uses, resulting in the same loss of raptor foraging habitat and Giant garter snake habitat as the Proposed Project. However, because only office and warehouse/light-manufacturing uses would be developed on the site, Alternative 2 would generate slightly less traffic, along with traffic-related air emissions and noise. Because it would result in development of the project site consistent with development proposed under the NNCP, Alternative 2 would be considered generally consistent with the NNCP and the City's General Plan regarding growth, and with the project objectives.

TABLE 4-23

COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

	Proposed Project	Alternative 1 No Project	Alternative 2 Community Plan Buildout	Alternative 3 Retail/Mixed Use	Alternative 4 Office
Transportation/Circulation	SU	-	-	Same	Same
Air Quality	SU	-	-	Same	Same
Noise	SU	-	Same	Same	-
Public Services	LS/MM	-	Same	Same	+
Public Health/Hazards	LS/MM	-	Same	Same	+
Hydrology and Water Quality	LS	-	Same	Same	+
Biological Resources	SU	-	Same	Same	+
Cultural Resources	LS/MM	-	Same	Same	+

Notes:

- = Alternative impacts less severe than the Proposed Project.
- + = Alternative impacts more severe than the Proposed Project.
- LS = All impacts would be less than significant, no mitigation required.
- LS/MM = All impacts would be less than significant after mitigation.
- SU = One or more impacts would be significant and unavoidable, even after mitigation.
- Same = Proposed Project and the Alternative impacts identical or very similar.

Source: EIP Associates, 2002.

5. LAND USE, PLANNING AND SOCIO-ECONOMIC EFFECTS

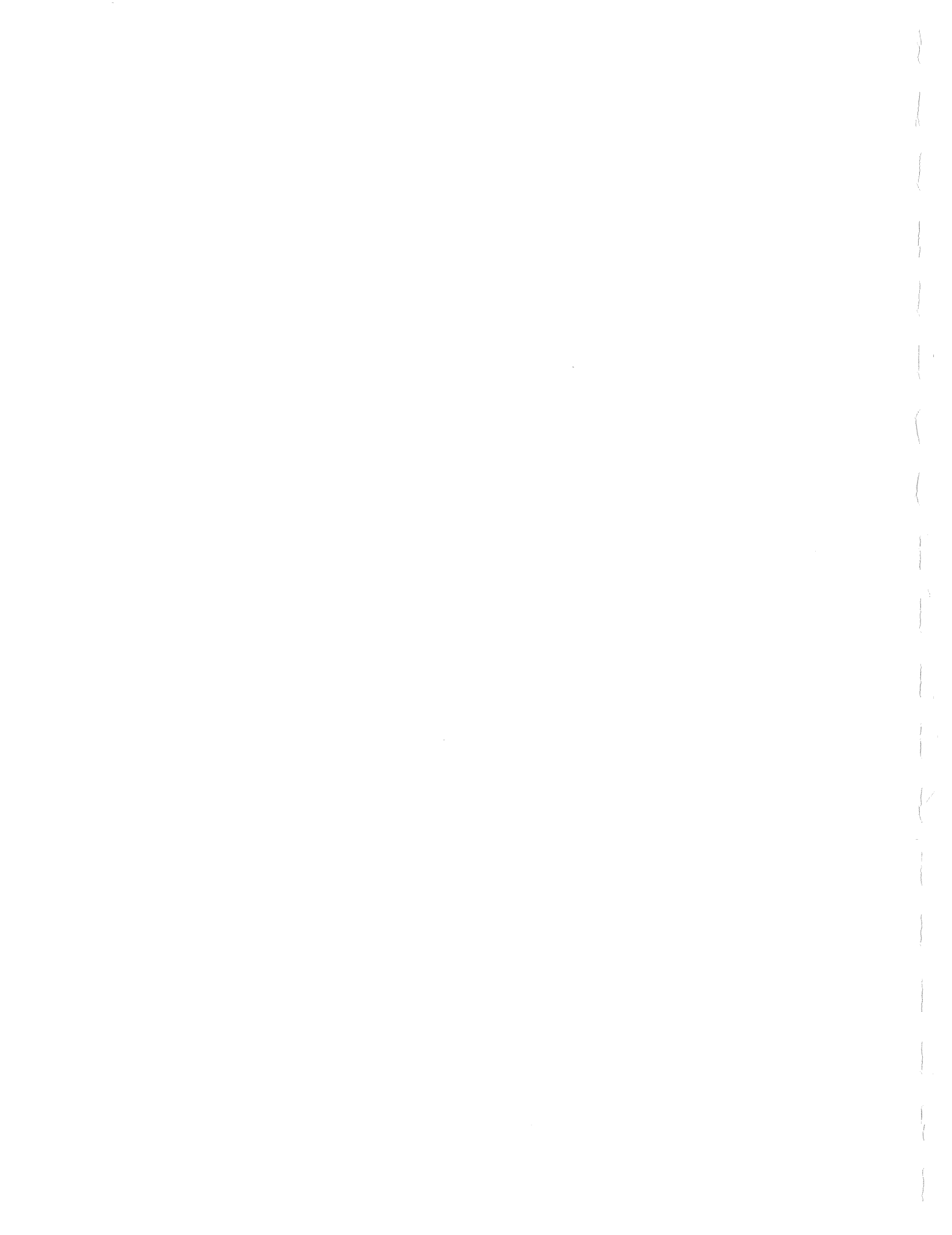
5.0 LAND USE, PLANNING AND SOCIO-ECONOMIC EFFECTS

INTRODUCTION

This chapter of the EIR provides an overview of the land use, planning and socio-economic effects that may result from development of the Proposed Project. CEQA does not recognize land use, socio-economic or population, employment or housing issues as direct physical impacts to the environment. A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project (CEQA Guidelines section 15064(d)(1)). Economic and social changes resulting from a project are not treated as significant effects on the environment (CEQA Guidelines section 15064(e)). Land use and socio-economic issues are described in Sections 5.1 and 5.2, respectively. Population, employment and housing issues are described in Chapter 6, and direct environmental impacts are discussed in the technical sections of Chapter 7.

Section 5.1 describes the existing land use setting of the project site and the adjacent area, identifies existing and planned land uses, applicable general plan policies and NNCP policies and zoning ordinances. The land use discussion addresses the consistency of the project with the City's General Plan, the NNCP, and the Zoning Ordinance, as well as compatibility with adjacent existing and planned land uses.

Section 5.2 describes the socio-economic effects related to development of a regional retail center. A review of existing economic analyses prepared for the City of Sacramento were reviewed. This section provides a general assessment of the potential indirect impacts resulting from the project's socio-economic effects.



5.1 Land Use and Planning

5.1 Land Use and Planning

INTRODUCTION

This chapter describes the existing and planned land uses both on the project site and in the project vicinity, including the current land uses, land use designations, and zoning as well as the socio-economic effects that may result from development of the Promenade at Natomas project. Section 15125 of the CEQA Guidelines states that the EIR shall discuss “any inconsistencies between the Proposed Project and applicable general plans and regional plans...” Potential inconsistencies between the Proposed Project and the City of Sacramento General Plan, the NNCP, and the City’s Comprehensive Zoning Ordinance are evaluated in this chapter. Documents referenced include the City’s General Plan, the North Natomas Community Plan, and the City’s Zoning Ordinance.

This chapter does not identify environmental impacts and mitigation measures. An EIR may provide information regarding land use, planning and socio-economic effects; however, CEQA does not recognize these issues as typical environmental impacts on the physical environment. Physical impacts on the environment that could result from implementation of the Proposed Project or project alternatives are not addressed in this chapter, but in the appropriate technical environmental sections of Chapter 7 of this EIR (see sections 7.2 through 7.10). Areas of concern raised in comment letters received on the Notice of Preparation (July 2000 and September 2002) (see Appendix A and C in Volume II of the Promenade at Natomas/Sacramento Auto Loop Project DEIR) include concerns related to increased retail development and compatibility with adjacent uses. These issues are discussed in this chapter.

SETTING

Project Location and Vicinity Characteristics

The 126-acre project site is located generally in the northwest quadrant of the City of Sacramento; however, property immediately to the east and north of the project site is within Sacramento County. The site is located northeast of the interchange of Interstate 80 with Truxel Road, within the NNCP area. The site currently designated as Heavy Commercial/Warehouse and Mixed Use Commercial under the existing General Plan. Under the existing NNCP, the project site is designated as Light Industrial and Employment Center 50 (EC-50). Under the existing zoning plan, the site is zoned as Agriculture -Planned Unit Development (A-PUD).

The project site is currently vacant. Land uses in the project vicinity include office to the east, warehouse and light industrial to the north, vacant land to the west across Gateway Boulevard, and the Natomas Marketplace shopping center west of Truxel Road. Interstate 80 and the Truxel Road interchange form the southern boundary of the parcel. There are vacant lands immediately south of Interstate 80 with residential areas further to the south. The City received an application for a gas station and fast food restaurant in the fall of 2000 for the triangular-shaped parcel directly adjacent

to the western boundary of the project site. At this time no development has occurred on this parcel.

REGULATORY CONTEXT

City of Sacramento

The Sacramento General Plan Update (SGPU) was adopted on January 19, 1988. The SGPU replaced the heavily amended 1974 General Plan for Sacramento and brought local issues into a contemporary framework for action. The General Plan is a 20-year policy guide for physical, economic, and environmental growth and renewal of the City.

City of Sacramento General Plan

The land use designations of the SGPU define the appropriate types, densities, and function of uses for each land use designation. The SGPU designates the project site as Heavy Commercial or Warehouse and Mixed-Use. This land use designation is defined by the Sacramento General Plan as follows:

Heavy Commercial/Warehouse

Includes lands developed with heavy commercial (printing, bakeries, laundries etc.), warehousing/distribution, and some light manufacturing activities. Office uses are allowed up to 25 percent of gross floor area, but are typically developed at 10 percent. Office uses of greater than 25 percent require a Special Permit and may be considered on a case-by-case basis. Activities in this category would have operational impacts (truck traffic, noise, hours of operation) that would not be desirable adjacent to retail commercial or residential uses. These uses would most likely locate in close proximity to transportation facilities possibly within planned industrial/business parks.¹

Mixed Use

Includes a mixture of office, commercial, open space and medium and high-density residential uses. In some larger, more intense development, light manufacturing and research-oriented activities may be appropriate. These uses are more ideally suited for land within the Central City, or adjacent to a high activity node along a light rail transit line or freeway corridor. The Southern Pacific Railyards site, within the Central City, and the Employment Center areas designated in North Natomas are examples of mixed-use development.

General Plan Goals and Policies

A total of nine sections are contained within the SGPU. Each section contains goals and policies intended to guide buildout of the City. The following General Plan goals and policies are applicable to the Proposed Project and project alternatives.

Regional Commercial and Office Areas

Goal A: **Ensure that the City of Sacramento captures a Regional Central City's share of the regional office market.**

1 City of Sacramento General Plan, January 1988, page 4-10.

- Policy 1:** Assist public and private interests in developing strategies for attracting and retaining major office users inside the City of Sacramento.
- Goal B:** Promote development of mixed-use regional commercial and office projects.
- Policy 1:** Strongly encourage new regional commercial and office centers to incorporate accessory uses as stated below.

Industrial Employee Intensive Areas

- Goal A:** Promote the development of employee intensive uses in selected locations where such uses would encourage Light Rail Transit ridership, promote planned housing opportunities; and offer incentives for reuse.
- Policy 1:** Support employee intensive uses where appropriate along transportation corridors, adjacent to Light Rail stations, within selected mixed-use areas, and where community plan and redevelopment goals would be implemented.

North Natomas Community Plan (NNCP)

The NNCP serves as a development guide to be used by the public and private sector when planning physical improvements in the North Natomas area. The NNCP includes text and land use diagrams that were adopted by the City of Sacramento City Council in May 1994. The Community Plan is a refinement of the General Plan, and is a refinement of the goals and objectives of the General Plan to serve a guideline for development specifically within the NNCP area. The primary goal of the NNCP is to continue revitalization of the Sacramento North Natomas area as a viable living, working, shopping, and cultural environment with a full range of day and night activities for residents, employees, and visitors to the North Natomas area.

NNCP Land Use Designations

Approximately 95.6 acres of the project site is designated in the NNCP for Light Industrial, and approximately 30.8 acres for Employment Center-50 (EC-50). The Light Industrial designation is intended for light manufacturing, warehousing and distribution services in a business park setting. Support retail services are encouraged to serve employees and employers in Light Industrial areas. The number of employees per acre in Light Industrial areas should not exceed 20.

The suffix on the EC designation indicates the average number of employees per acre allowed in the development (EC-50 indicates 50 employees per acre). The NNCP indicates that EC-50 would be an appropriate intensity around local bus, light rail and shuttle routes.²

The Employment Center land use designation is intended to provide a mixed-use business center that incorporates primary employment generating uses such as office, high-tech uses, medical and educational facilities, and child care centers. Secondary uses in the EC land use designation, which are intended to serve the employees and employers in the center, could include support retail, light industrial, and residential uses. Secondary uses are limited to 10 percent of the acreage for support retail, 20 percent light industrial, and 25 percent medium- or high-density residential uses.

² EC-80 densities are supported within 1/8 mile radius of Light Rail Transit station.

The NNCP includes the following goals and policies which are applicable to the Proposed Project and project alternatives.³

Employment Centers

Vision: The Employment Center (EC) land use designation is intended to provide a flexible zone for primarily employment generating uses in a pedestrian friendly setting with ample private and/or public open space. The EC designation has several categories of permitted intensities. The designation of intensity was determined based on proximity to planned transit service, access to freeways and roads, proximity to the Town Center, and maintaining or improving housing opportunities.

The EC designation also provides the opportunity for a variety and mix of supporting uses, including residential. The close proximity of supporting uses allows for pedestrian, bicycle, transit/rideshare connections opportunities which helps reduce dependence on the automobile by employees and internalizes trips on-site. Consequently, parking needs will be reduced and shared parking opportunities will increase.

Guiding Policies:

- A. Designate Employment Centers along the light rail corridor, along both sides of Interstate 5, and elsewhere in the community in order to provide flexible, mixed-use employment centers that serve the needs of major employers and employees.
- B. Create mixed-use Employment Centers by allowing major employers and permitting support uses such as retail, residential, and light industrial uses in the EC designation.
- C. Locate the highest intensity EC uses along the light rail corridor to encourage an interdependence between the transit service and land uses.
- D. Encourage further intensification of EC uses within 1/8 mile of the light rail stations once funding for the construction of the light rail extension is assured.
- E. Decrease the need for off-site auto trips during the day by requiring support retail within each EC PUD.
- F. Maintain or improve the 1986 jobs/housing ratio of 66 percent in the City portion of the North Natomas Community Plan Area.
- G. Improve the jobs/housing link by permitting residential uses in close proximity to the major employers.

Transit System

Vision: North Natomas has been expressly designed to benefit from the symbiotic relationship between transit and land use. To this end, the transit system must be sensitively planned to provide a valuable, convenient service to the residents and workers. And, land uses must be planned to provide the ridership base imperative to a successful transit system. The transit system includes the Regional Transit light rail and bus system and the community shuttle system.

Guiding Policies:

- A. Because of the interdependence of transit and land use, transit service must be available for each development phase.

3 North Natomas Community Plan, May 1994, pages 21-32.

- B. Provide a hierarchy of transit service including light rail, express buses, local buses, and shuttle buses. The light rail and express bus systems serve the inter-community transit needs; the local bus system serves the inter-neighborhood needs; and the local shuttles serves the intra-neighborhood needs.
- C. Provide a concentration of density at each phase to support appropriate transit service.
- D. Design for a phased implementation of transit corridors to accommodate intermediate states of land use development.
- E. Maximize rider access to transit stops and stations.
- F. Minimize air quality impacts of transit service by providing a support network for zero-emission transit vehicles.

Commercial

Vision: Locating an appropriate amount of commercial space in a community is a balancing act. The Community Plan attempts to provide sufficient commercial space in well placed locations that provides the daily and weekly goods and service all residents, workers, and visitors require, without burdening the community with too much commercial space or making the distance between such service and residential neighborhoods too great. Healthy commercial enterprises foster the local economy by generating sales tax, creating jobs, and enhancing the land value. Supplying too much commercial space spreads the retail demand of the community too thin and may result in weaker businesses and local economy.

The basic strategy in the plan is to provide a neighborhood convenience center in each neighborhood, small village commercial centers that serve two to four neighborhoods within walking or bicycling distance, and two larger community commercial areas near light rail stations or bus transit centers. One of the community commercial centers, serving all the residents and workers on the east side of I-5, anchors the east boundary of the Town Center, located at a light rail station. The other community commercial center, serving the west side of I-5, is located at Del Paso Road and El Centro Road near the bus transit center. Three transit commercial centers are located in the plan are: a village size center at the northern light rail station on East Commerce Way, a town center size center at the Town Center light rail station, and a village size center at the middle light rail station along Truxel Road. The transit commercial centers are designed to serve the transit riders with retail goods and service. And, a regional commercial center is designated at the northwest corner of Truxel Road and Interstate 80 to serve the retail goods and services needs of three communities, North Natomas, South Natomas, and North Sacramento, as well as the region.

Guiding Policies:

- A. Provide commercial facilities that meet the daily and weekly needs of and are convenient to North Natomas residents, workers, and visitors.
- B. Provide convenient access from the community to the two existing regional commercial centers, Downtown Plaza and Arden Fair Mall. Careful consideration should be given prior to designating a site for a regional commercial center as there may be insufficient retail demand to establish a new regional center without diminishing the health of the two existing centers. Care should be taken to encourage tenant types that will not compete with the existing regional centers.
- C. Confine commercial to designated sites to avoid strip commercial.
- D. Provide commercial sites at transit stations/stops to make it easier for transit riders to shop in their community rather than making a separate trip.

Industrial

Vision: Industrial areas shall be designed: 1) to ensure the development of a park-like, nuisance free environment for light manufacturing, warehousing and distribution land uses in an industrial park setting; 2) to protect and preserve prime industrial land for high quality manufacturing, assembly, research and development, and related supporting uses; and 3) to discourage unrelated and incompatible industrial, commercial, office, residential, and other non-industrial uses.

Guiding Policies:

- A. Provide for comprehensive industrial development that significantly contributes to the City's employment base while not competing with the types of industrial uses that would likely locate in North Sacramento.
- B. Develop attractive and nuisance-free industrial parks that will contribute to the desirability of the community as a whole.
- C. Provide adequate access to industrial uses.
- D. Provide adequate support retail goods and services to industrial uses.

The project site is located near a proposed light rail transit station to be located near the intersection of Gateway Boulevard and Truxel Road. The EC designation in the NNCP stipulates a minimum and an average employee density per net acre, for example, the designation of EC 30 requires a minimum of 20 employees per net acre and an average of 30 employees per net acre.⁴

City of Sacramento Zoning Ordinance

The City of Sacramento Zoning Ordinance (Sacramento City Code Title 17) is intended to encourage the most appropriate use of land, conserve, stabilize and improve the value of property, provide adequate open space for recreational, aesthetic and environmental amenities, and control the distribution of population to promote health, safety, and the general welfare of the population of the city (§17.04.020). To achieve this goal, the Zoning Ordinance regulates the use of land, buildings, or other structures for residences, commerce, industry, and other uses required by the community. The Zoning Ordinance also regulates the location, height, and size of buildings or structures, yards, courts, and other open spaces, the amount of building coverage permitted in each zone, and population density and divides the city into zones of such shape, size, and number best suited to carry out these regulations, and to provide for their enforcement.

The Zoning district for the project site is a Planned Unit Development (PUD). The purpose of a PUD (§17.180.010) is to provide for greater flexibility in the design of integrated developments than otherwise possible through strict application of zoning regulations. The intent of the PUD district is to encourage the design of well-planned facilities that offer a variety of land uses through creative and imaginative planning.

Proposed Project Elements

As detailed in Chapter 3, Project Description, the Proposed Project consists of three different land use designations. Development under the Proposed Project would require an amendment of the City's General Plan. The 95.6 acres currently designated for Heavy Commercial/Warehouse uses

4 North Natomas Community Plan, 1994, page 20.

would change to 95.6 acres designated for Regional Commercial and Office uses. The 30.8 acres would remain Mixed Use Commercial as stated in the General Plan, but the boundaries between the two land uses would require a realignment. Development under the NNCP would require an amendment to change the 95.6 acres designated for Light Industrial uses to 95.6 acres designated for Regional Commercial. The 30.8 acres would remain Employment Center-50 but would also require a realignment. A re-zone of the entire 126.4 project site zoned A-PUD would be required. The re-zone would change 30.8 acres currently zoned Employment Center-50 (EC-50) to EC-50 Planned Unit Development (EC-50-PUD) and A-OS-PUD (for the drainage easement/setback), and 95.6 acres to Shopping Center Planned Unit Development (SC-PUD) and A-OS-PUD (for the drainage easement/detention basins). The Proposed Project would include the following General Plan and NNCP land use changes, as shown in Table 5.1-1:

	Existing SGPU	Amended SGPU	Existing NNCP	Amended NNCP
Area 1 (West Parcel)	Mixed Use Commercial	Mixed Use Commercial	EC-50	EC-50
Area 2 (Central Parcel)	Heavy Commercial or Warehouse	Regional Commercial and Offices	Light Industrial	Regional Retail
Area 3 (Northern and Southern Parcel)	Heavy Commercial or Warehouse	Regional Commercial and Offices	Light Industrial	Regional Retail

Source: EIP Associates, 2003.

The Proposed Project would include the following zoning changes, as shown in Table 5.1-2:

	Existing Zoning	Proposed Zoning
Area 1 (West Parcel)	A-PUD	EC-50 PUD
Area 2 (Central Parcel)	A-PUD	SC PUD
Area 3 (Northeast and South Parcel)	A-PUD	SC PUD

Source: EIP Associates, 2003.

LAND USE AND PLAN EVALUATION

Methods of Analysis

The Proposed Project are evaluated for compatibility with the existing and planned land uses, consistency with applicable policies, including the General Plan and NNCP, and zoning consistency. Environmental impacts resulting from the Proposed Project are discussed in the respective environmental categories (e.g., section 7.2, Transportation and Circulation for significant traffic impacts and section 7.3, Air Quality for air quality impacts). An inconsistency is identified if the

Proposed Project is inconsistent with the City's Comprehensive Zoning Ordinance or any applicable adopted plan. This section differs from other discussions in that plan consistencies are addressed as opposed to environmental impacts and mitigation measures. This discussion complies with section 15125(d) of the CEQA Guidelines, which requires EIRs to discuss inconsistencies as part of the environmental setting.

Compatibility with Existing and Planned Adjacent Land Uses

The Proposed Project is evaluated for its compatibility with the existing and planned land uses adjacent to the project site. The evaluation considers the type and intensity of uses in the project vicinity. The analysis evaluates the Proposed Project against the existing environment and determines if it is compatible with those existing and planned uses surrounding the project site. As stated above, the respective environmental sections are referred to for discussion of any potential physical/environmental impacts that are identified (e.g., 7.2 Transportation and Circulation section for traffic impacts and 7.3 Air Quality section for air quality impacts).

Long-term incompatibilities arise when adjacent land uses result in activities that could conflict with each other. For example, land uses that produce excessive noise, light, dust, odors, traffic, or hazardous emissions may be undesirable when they intrude on places where people sleep and recreate (residences and parks). Therefore, some industrial or agricultural uses (which can produce noise, odor, and so on) would not be considered compatible with residential uses, unless buffers, landscaping or screening can be used to protect residents from health hazards or nuisances.

Consistency with Adopted Plans and Policies

This chapter discusses any inconsistencies between the Proposed Project and the adopted land use designations related to the project site. This consistency analysis considers the adopted goals and policies of the SGPU and the NNCP. Mitigation measures are not identified for any inconsistencies identified; however these inconsistencies may be considered in the determination of physical environmental impacts identified in the technical issue sections of this document.

Zoning Consistency

The Proposed Project is compared to the City's Comprehensive Zoning Ordinance to identify any inconsistencies. An inconsistency with the zoning ordinance does not constitute a physical environmental impact. Zoning inconsistencies may be eliminated in one of two ways: (1) change an element of the project to be consistent with the zoning requirements (e.g., modify parking spaces to be consistent with the minimum standards), or (2) grant approval of the appropriate entitlement to waive the zoning ordinance requirements. No environmental threshold exists for this category, as it does not result in a direct physical change in the environment.

Compatibility and Consistency Analysis

5.1-1 Compatibility With Existing and Planned Adjacent Land Uses.

Implementation of the Proposed Project would convert the entire 126-acre project site to urban uses. The project site is located within the City of Sacramento's jurisdiction and has been designated for future development both under the City's General Plan and the North Natomas Community

Plan. The Proposed Project includes development of a primarily regional retail and office use development with accompanying parking facilities (as shown on Figure 3-2 in Chapter 3, Project Description). The existing surrounding land uses include office development to the east, warehouse and light industrial uses to the north, vacant land to the west across Gateway Boulevard, and the Natomas Marketplace shopping center to the southwest across Truxel Road. The closest residential area is Natomas Crossing located approximately one half mile to the northeast of the project site. During project construction, the area around the project vicinity could experience short-term temporary impacts from noise, dust, and construction traffic as the site is developed. These impacts are analyzed in the appropriate technical sections of this EIR. Long-term incompatibilities arise when adjacent land uses result in activities that could conflict with each other. For example, land uses that produce excessive noise, light, dust, odors, traffic, or hazardous emissions are undesirable when they intrude on places where people sleep and recreate (residences and parks). Therefore, some industrial or agricultural uses (which can produce noise, odor and so on) are not considered compatible with residential uses, unless buffers, landscaping or screening can be used to protect residents from health hazards or nuisances.

The Proposed Project would be located near the Natomas Marketplace shopping center, undeveloped land, and office and light-manufacturing/warehousing uses to the south, west, north and east of the project site. Because the closest residential area is located approximately one half mile from the project site the distance between the two uses would ensure that there would be no land use incompatibilities (e.g., nuisance issues associated with increased noise, traffic, light, or odors) between the Proposed Project and residences. In addition, due to the types of proposed uses the Proposed Project would not generate excessive noise, light, dust, odors, traffic, or hazardous emissions that could be considered incompatible with existing adjacent land use, because the existing land uses are either retail, commercial or light industrial uses that are similar to those in the Proposed Project.

Planned adjacent uses include a proposed gas station and fast food establishment immediately to west of the project site in a small triangle of land, and an office/ retail project is also proposed west of the project site across Gateway Boulevard. No other vacant land is located adjacent to the project site slated for development. As discussed above, the Proposed Project would not generate excessive noise, light, dust, odors, traffic, or hazardous emissions that could be considered incompatible with the planned adjacent land uses. The planned adjacent uses are similar uses to the Proposed Project so it is not anticipated that any land use incompatibility would occur.

5.1-2 Consistency with the City of Sacramento General Plan Update.

The project site is designated in the City of Sacramento General Plan for Mixed Commercial (Mixed-Use) and Heavy Commercial or Warehouse. The relevant City of Sacramento General Plan goals and policies are identified in the Regulatory Context section of this chapter. The relevant city goals and policies are focused on ensuring that the city promotes a regional office market and promoting development that encourages a mixed-use regional commercial and office projects, and developing employee intensive uses that would encourage light rail ridership. Each technical section in this EIR includes a review of applicable General Plan goals and policies specific to that particular technical area. This consistency analysis will provide the reader with a general overview of the City's goals and policies and explain whether the project is essentially in harmony with the overall intent of the goal or policy. It is within the City's purview to interpret its own General Plan and to ultimately decide if the Proposed Project is consistent or inconsistent with any City goals or policies.

The Proposed Project would require a General Plan amendment to slightly modify the distribution of land uses between Heavy Commercial or Warehouse and Mixed Commercial to Regional Commercial and Office and Mixed Commercial.

As stated in the Regulatory Context section, the General Plan includes specific goals and policies designed to capture a share of the regional office market (Goal A) and to promote mixed-use commercial and office projects (Goal B) which would be considered applicable to the Proposed Project. The conversion of the project site from the designations set forth under the General Plan from Heavy Commercial/Mixed Commercial use to Regional Commercial would essentially meet the intent of both of these goals, which are for the City to capture a regional office market; to promote the development of mixed-use regional commercial and office projects; and to promote the development of employee intensive uses in selected locations. The Proposed Project includes 504,000 sf of employment center use on approximately 26.02 gross acres and 751,000 sf of regional commercial use on approximately 78.4 gross acres. The Proposed Project would be considered consistent with the overall intent of the City's goals and policies.

5.1-3 Consistency with North Natomas Community Plan.

As discussed earlier in this chapter, the NNCP was adopted by the City Council in 1994 and amends the City's General Plan by refining the goals and policies of the City's General Plan and providing a guideline for future development within the North Natomas area of the city. The NNCP includes a Vision, which is similar to a goal, and specific Guiding Policies designed to implement the Vision. Under the NNCP the project site is designated Employment Center (EC)-50 and Light Industrial. A discussion of the NNCP and applicable goals and policies is included in the Regulatory Context section of this chapter.

The project site is located within an area of the City that is experiencing tremendous growth at this time. Throughout the 1980s the City worked closely with city residents to develop the NNCP for this area of the city. In developing land use designations for this area, the City identified a mix of uses in the North Natomas area that overall would achieve the goals and policies set forth in the general plan and NNCP. Since the NNCP is a refinement of the existing goals and policies included in the general plan it is more tailored to the unique aspects of the North Natomas area. A detailed discussion relating to the consistency with the NNCP is included under Impact 5.2-2 in Section 5.2, Socio-Economic Effects.

A proposed light rail stop is planned at the intersection of Truxel Road and Gateway Park Boulevard, near the project site. At this point the precise location is not known nor is it known whether the light rail tracks will be routed along the east or west side of Truxel Road. The Proposed Project calls for developing employee intensive uses, consistent with the EC-50 designation in the NNCP, within 1/4 of this proposed light rail stop. The Proposed Project includes 504,000 sf of office uses adjacent to the southeast corner of the site, within the area designated and zoned for EC-50, which will facilitate the use of the adjacent proposed light rail transit. Proximity of office uses adjacent to the proposed retail development would also promote more walking and less automobile use.

The Proposed Project includes development of regional commercial and employment center uses. The project would require a rezone to PUD which is the zoning designation required by the NNCP.

PUD's provide "greater flexibility in the design of integrated developments than is otherwise possible through strict application of zoning regulations." Implementation of the Proposed Project would require an amendment to the City's General Plan and a slight modification to the NNCP to change light industrial to regional commercial.

The NNCP stresses the importance of developing relatively dense employment opportunities and residential development near future light rail extensions. As discussed earlier, a proposed light rail stop is planned near the intersection of Gateway Boulevard and Truxel Road near the project site. The Proposed Project calls for the area currently designated EC-50 under the NNCP to remain EC-50 and be developed with 504,000 sf of office uses. The vision for Employment Centers in the NNCP is to provide a "flexible zone for primarily employment generating uses in a pedestrian friendly setting with ample private and/or public open space." The guiding policies include designating employment centers along light rail and along both sides of Interstate 5; and encouraging intensification of EC uses within 1/4 to 1/8 of a mile of light rail stations. Another vision within the NNCP is to encourage development of a transit system that provides convenient service to residents and workers in the area. The guiding policies include allowing for a concentration of density to support transit service and maximizing access to transit stops and stations. The NNCP includes land designated for EC around transit stops because more employee-intensive uses support light rail transit. The Proposed Project appears to be consistent with the intent of the EC vision and the guiding policies.

The vision for commercial development within the NNCP is to provide a range of commercial areas from small neighborhood-serving centers to a regional commercial center where the project site is located. The project is essentially an office and regional commercial center that will serve retail goods and services for North Natomas, South Natomas and the region; the project appears consistent with this vision of the plan.

5.1-4 Consistency with City of Sacramento Zoning Ordinance.

As described in Chapter 3, Project Description, the City's General Plan and the NNCP would require an amendment to modify the current land use designation and acreage amounts. In addition, under the Proposed Project, a rezoning would be required. The respective rezoning would require City Council approval, but would ensure full consistency with the City of Sacramento Zoning Ordinance, if they were to be approved.

The proposed zoning for the Proposed Project includes Shopping Center uses (SC-PUD) and Employment Center uses (EC-50 PUD) which are consistent with the city's zoning districts. Uses that are permitted under this zoning designation but would not be allowed for this project include the following: room and boarding house, single and multi-family units, fraternity-sorority housing, child care, mobile homes, temporary residential shelters and services for the homeless, artist's live/work space, laundromat, non-residential care facility, vehicle maintenance and storage facility, and movie theaters.

Some uses are permitted under this zoning designation but would not be allowed for this project including those listed above as well as the following: mortuary, adult entertainment, towing service and vehicle storage yard, flea market, firing range, beverage bottling plant, concrete plant, composting facility, mining, hazardous waste facility, recycling facility, fuel storage, and junk yard.

The Proposed Project does not specify what types of retail or office uses are envisioned on the project site. However, a special permit is required per the City requirements, and the City's Planning Commission could approve a specific land use not otherwise permitted, based on a finding of consistency with the purpose of the zone and if the proposed use is of the same general character as that of the uses permitted in that zone.

As discussed in Chapter 3, Project Description, the Proposed Project would provide landscaping around the project site and within the parking lots in compliance with the City's landscaping and shading requirement.

Specific design details are not available at this time including proposed building heights and setbacks. Therefore, these issues cannot be evaluated at this time; however, once this information is available the City will review to ensure consistency with the City's zoning ordinance. As discussed in the Initial Study (see Appendix B) it is assumed the project will comply with the Natomas Village Center Design Guidelines. The Natomas Village Center Design Guidelines specify types of landscaping, architectural styles and details, and appropriate signage and lighting. The project applicant has indicated that the site will be an extension of the existing Natomas Marketplace project and the landscaping and architecture will be compatible with the Natomas Marketplace to the west. Because the project is requesting a rezone it would be considered incompatible with the City's current Zoning Ordinance. Should the City Council approve the requested rezone, the project would be consistent with the zoning. However, the rezone is a discretionary action of the City Council.

5.2 Socio-economic Effects

5.2 Socio-Economic Effects

INTRODUCTION

As stated previously, CEQA does not recognize socio-economic issues as physical impacts to the environment. The CEQA Guidelines (section 15131) state that economic or social information may be included in an EIR; however, the economic and social effects of a project are only considered significant to the extent that the economic effects result in a physical change to the environment. Therefore, this chapter describes the socio-economic effects related to retail development associated with the project and the project alternatives. Information pertaining to the retail environment in North Natomas and the region as a whole is included in this chapter as well as a general assessment of the potential indirect impacts resulting from the project's anticipated socio-economic effects.

Documents referenced include the North Natomas Community Plan, three economic studies prepared by Economic Research Associates (ERA) *Regional Retail Demand Attraction and Development by the City of Sacramento, Sacramento, California*, *Retail Market Demand and Allocation in the North Natomas Area of the City of Sacramento*, and *Regional Retail Market Demand and Attraction to Downtown Sacramento*. A copy of these reports is available for review at the City's Planning Department, 1231 I Street, Suite 300, Sacramento, California.

Existing Socio-economic Setting

In 1999, the City of Sacramento retained ERA to analyze the economic health of the region, the downtown area, and North Natomas. ERA prepared three separate reports; *Regional Retail Demand Attraction and Development by the City of Sacramento, California*, *Regional Retail Market Demand and Attraction to Downtown Sacramento, California*, and *Retail Market Demand and Allocation in the North Natomas Area of the City of Sacramento, California*. The reports were prepared in 1999 and subsequently updated and finalized in March 2000.

The Regional Retail Demand Attraction and Development Report

The *Regional Retail Demand Attraction and Development Report* evaluated the regional retail positioning for the City of Sacramento and how the City could work competitively in the evolving framework of regional retail attractions to the best advantage of the City, including revitalizing existing older commercial retail areas in the city. The report provides an overview of the simultaneous factors that influence the regional retail positioning strategy:

- Shopping populations are growing in the northeast (Roseville/Rocklin and beyond) and to the north (North Natomas), and to the south in the Elk Grove and Laguna districts.
- This is "the best of times" for standard retail floor space performance, buoyed by 6 years of growth in business volumes.

- The Sacramento region (4 counties) experienced lesser dislocation during the 1991-1993 recession than most other California metro areas.
- The concentrations of governments, education, agribusiness, and the growth of technology provide a resilient economic base at present, and for the near-term future (over the next 5 years, 2000-2005).
- The region is unique in that there are relatively few municipalities, in a pattern of the spreading urban districts: this may not last. New cities, formed from existing developed unincorporated areas, will focus upon fiscal sustainability and retail land use performance.
- Because of the relatively high levels of educational attainment and the vast spread of use of computers and electronic communications in the basic economic sectors of the region, it will be no surprise that e-commerce will rapidly increase its shares of retail sales volumes in the Sacramento region.
- Developers have been scrambling to establish major retail location entitlements in the region. Some proposals appear to be “placemarkers,” others are “intercepts” on the regional freeways, and several should be seen as very long-term intentions.
- Despite regional population growth and the spread of new rooftops, the focus of planned community and neighborhood centers will be contingent upon the continuing consolidation and repositioning of grocery market chains, drug store chains, and home improvement/hardware outlets.
- The “shop for value” phenomena - which is offered by power centers, big boxes, catalogs, and e-commerce - will continue to grow in market shares.
- Retail/dining/entertainment (“RDE”) developments appear to require more frequent change out of tenancies and freshening of the experience blends.
- On a comparative basis with 9 other U.S. metropolitan retail market regions of somewhat similar size, Sacramento appears to be at the median in terms of developed floor space per capita in neighborhood and community shopping centers and in regional and superregional malls. Several of the regions evaluated, which also have high growth profiles, have or are adding more floor space.¹

Based upon the analysis contained in the report, ERA made eight recommendations that provide guidelines for (1) selecting appropriate projects, (2) negotiating priorities, (3) evaluating combined mutual strengths, and (4) strengthening the City’s overall retail position.

The eight recommendations are listed below:

1. Encourage North Natomas Community Centers development first phases (entitlements) to commence construction in the very near future.
2. Stimulate Westfield/Taylor Downtown Plaza/Lot A/K Street revitalization negotiations and approvals now that the City has selected the development team (October 1999).
3. Encourage Arden Fair Mall repositioning and expansion; it should continue to be the City’s major superregional mall.

1 Economic Research Associates, *Regional Retail Demand Attraction and Development by the City of Sacramento, California*, revised March 20, 2000, Table II-1.

4. Negotiate to blend the Mills Corporation proposal for the railyards toward a less competitive position with the Downtown Plaza retail mix (On February 7, 2000, Mills withdrew its proposal for railyards development).
5. Continue to encourage and stimulate office clustering in downtown, keeping and increasing office employee concentrations which support retail/dining/entertainment.
6. Schedule and construct access improvements serving South Natomas, North Natomas, and North Sacramento. Also initiate construction of planned downtown circulation improvements as soon as feasible and fundable.
7. Initiate land assembly on the K Street Mall in order to stimulate retail and commercial services revitalization.
8. Select desirable and differentiated true regional retail specialties for Natomas area freeway frontages.²

Regional Retail Market Demand and Attraction to Downtown Sacramento Report

The *Regional Retail Market Demand and Attraction to Downtown Sacramento* (March 2000) report was prepared to advise on retail, office, and housing prospects in the Downtown area. The report identified retail development as one of the components of a Downtown development strategy to continue implementation of the redevelopment program and create an additional market advantage to further capture the benefit of a sustained and increased economic activity in the Downtown area. Specifically, the report states that it is imperative that the City, property owners and tenants pursue retail revitalization and cooperative marketing and transit ventures that favor the continued vitality of Old Sacramento and the middle and east end of the K Street Mall, and development of the R Street Corridor.³

Retail Market Demand and Allocation in the North Natomas Area of the City of Sacramento Report

Based on the success of the Natomas Marketplace Shopping Center (west of the Proposed Project site) there is evidence that the Natomas Marketplace acts as an “intercept” in the market and that the Natomas Marketplace has rearranged the shopping patterns of the City of Sacramento and Sacramento regional households. Because of the experience of the Natomas Marketplace and additional proposals for community shopping centers and power centers in the North Natomas community, the City requested an analysis of the prospects for change and the impacts that additional retail development in the region and in North Natomas could have on the NNCP and residential neighborhoods. Following is an overview of the circumstances affecting retail opportunities in North Natomas:

- Further General Plan changes to accommodate proposed additional power centers will both dilute and intercept the viability of the planned community and neighborhood centers.
- The neighborhood centers may already be in jeopardy as the developers seek to “prove-up” their entitlements for the community scale shopping centers.

2 Economic Research Associates, *Regional Retail Demand Attraction and Development by the City of Sacramento, California*, revised March 20, 2000, Table II-3.

3 Economic Research Associates, *Regional Market Demand and Attraction to Downtown Sacramento, California*, revised March 20, 2000, page II-3.

- The distinctions between power centers and community centers are blurring as developers seek to capture a mix of regional supermarket chains, discount department stores (e.g., Target), home improvement chains (i.e., Eagle, Lowe's), office supply, and cineplexes.
- Even if new rooftops arrive at a rate of 1,000 housing units per year in North Natomas, there may be some risk in simultaneous competitive development of multiple community shopping centers in the very near future.
- Both community scale shopping centers (Lennar/Donahue-Schriber and Lewis Group) located on Del Paso Road are currently proposed as phased projects. Both have filed for entitlements. They are located roughly 1/2 mile from each other.
- The Natomas Marketplace, now open for 21± months, draws its present patronage from South Natomas and North Sacramento and from the rest of Sacramento City and County. Over the near term it will easily serve the new North Natomas housing districts.
- "Employment Center" land use designations allow development/dispersal of retail floor space, up to 10 percent of "EC" parcel acreage - along the freeway ramp arterials. While designed to serve employees and employers, such retail uses might take on tenant types which provide retail and commercial services convenience to residential hinterlands as well.
- The pace of residential construction in North Natomas, west of 1-5, may generate community shopping demand earlier than might have been anticipated, which may or may not be conveniently served by the two proposed community centers on Del Paso Road east of 1-5, or by a community center west of 1-5, or by existing and proposed power centers. The City should support development of community retail center allocations west of 1-5 as defined in the Community Plan.
- The proposed Stadium Boulevard freeway bridge and ramps at 1-5 are not expected to be in place until after 2005. Thus, near-term North Natomas residential shoppers will use Del Paso Road and/or Truxel for access to retail sites, if South Natomas retail is not attractive and competitive.
- Generally, the proposed rapid development of the freeway frontages with "Employment Centers" will quickly change the perceived character of North Natomas. Freeway ramp traffic volume loadings may increase dramatically during the next decade.⁴

The report finds that the development of community centers should be pursued in the North Natomas area and that the City should examine regional retail opportunities at larger properties along I-80. Any such regional retail, however, should possess significant differentiation from power centers and community centers such that it truly draws from the Sacramento region.⁵

The report states that in 2000 there was nearly 2.36 million square feet (sf) of retail space proposed at six potential locations in North Natomas (which includes the Proposed Project). The report further states that if residential development in North Natomas reaches a projected pace of 1,000 dwelling units occupied per year, it would take approximately five years to generate demand for 170,000 sf of retail services (based upon 21 feet of retail per capita).

4 Economic Research Associates, *Regional Market Demand and Allocation in the North Natomas Area of the City of Sacramento, California*, revised March 20, 2000, Table II-1.

5 Economic Research Associates, *Regional Market Demand and Allocation in the North Natomas Area of the City of Sacramento, California*, revised March 20, 2000, page II-3.

REGULATORY SETTING

Methods

CEQA Requirements for Analysis of Socio-economic Effects

CEQA Guidelines state that economic or social information may be included in an EIR or may be presented in whatever form the agency desires (CEQA Guidelines section 15131). However, the economic and social effects of a project are only considered significant to the extent that the economic effect results in a physical change to the environment. CEQA Guidelines section 15131(a) states:

Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

Impacts analyzed in an EIR must be “related to a physical change” in the environment. Nevertheless, physical changes to the environment caused by a project’s economic or social effects are secondary impacts that must be included in an EIR’s impact analysis if those physical changes are significant. In situations where a project could conceivably result in business closures that in turn result in a significant physical deterioration on existing business centers, an EIR should analyze the potential for this effect.

CEQA only requires that an impact be related to a physical change in the environment. An indirect physical effect could contribute to the physical deterioration of buildings resulting in blight. Blight can be caused by either a change in the physical or economic conditions. For example, a physical condition which could result in blight occurring could be a neglected, substandard building. An economic condition that could result in blight includes a depreciation in property values associated with abandoned buildings or vacant lots.

For the purposes of CEQA, the Proposed Project would result in a significant impact on the environment if the economic effects of the project translate into significant physical changes in the environment. The environmental impacts resulting from the Proposed Project are discussed in the respective environmental categories (see sections 7.2 through 7.10 of this EIR). Therefore, this information is provided for use by the City and the public in considering the appropriateness of the project, but is not an impact analysis under CEQA.

Socio-economic Analysis

To address the potential socio-economic affects of the project, the reports prepared by ERA were reviewed to prepare the analysis. The analysis will address the potential for the Proposed Project to attract retail to the project site resulting in the physical deterioration associated with the relocation of existing retail uses to the site.

Socio-economic Effects

5.2-1 Economic Effects on the Regional Retail Market, including Downtown Sacramento.

The report, Regional Retail Demand, Attraction, and Development, prepared by ERA identifies the Downtown Plaza Mall and the Arden Fair Mall as serving primarily the regional retail markets. Regional Retail Centers are characterized by ample retail opportunity for large and small purchases. These centers typically offer a variety of products not frequently purchased, such as large appliances, furniture, etc.

The Proposed Project includes shopping center and employment center uses. The maximum amount of retail proposed is 751,000 sf and approximately 504,000 sf of office space. It is not anticipated that the amount and type of retail uses proposed as part of the project would pull shoppers away from the existing retail uses in the Downtown Plaza, Arden Fair Mall, or the Roseville Galleria. The types of retail uses are anticipated to be a mix of larger retail outlets similar to the types of stores in the Natomas Marketplace shopping center, as well as smaller retail stores and restaurants to serve the adjacent office uses as well as the north and south Natomas neighborhoods. This type of retail store is different from what is provided in Downtown Plaza, Arden Fair, or the Roseville Galleria. Therefore, it is not anticipated that the project would negatively affect those existing retailers resulting in a physical or economic change that could lead to blight.

It is anticipated that some of the larger retail uses, located in the northern portion of the site, could be "big box" retailers or unique retailers that require a large stand-alone facility, like a large home furnishings type of retailer. This type of retail use would attract a larger regional market but would not compete with the shopping opportunities provided at Downtown Plaza, Arden Fair Mall, or the Roseville Galleria because the big box retailers do not locate in malls and usually carry merchandise that does not directly compete with the smaller drain retailers that are in malls.

As stated under the methods section, CEQA only requires that an impact be related to a physical change in the environment. An indirect physical effect could contribute to the physical deterioration of buildings resulting in blight. Blight can be caused by either a change in the physical or economic conditions. A physical condition which could result in the creation of blight could be a neglected or substandard building. An economic condition that could result in blight would include a depreciation in property values associated with abandoned buildings or vacant lots.

Due to the types of retail uses proposed as part of the Proposed Project, it is not anticipated that the project would attract shoppers away from Downtown Plaza, Arden Fair Mall, or the Roseville Galleria resulting in a situation that could lead to the physical decline of an existing area resulting in a change in the physical or economic conditions of the area contributing to blight.

5.2-2 Economic Effects on the North Natomas Community Retail Market.

The NNCP currently calls for a combination of and Employment Center and Light-Industrial uses for the project site. The plan states an "Employment Center (EC-50) land use designation is intended to provide a flexible zone for primarily employment generating uses in a pedestrian friendly

setting with ample private and/or public open space”⁶. The flexibility within this designation allows for various uses to locate within this zone in order to reduce the dependence on automobiles, thereby reducing the need for additional parking, generating fewer auto trips, etc. The Light-Industrial designation hopes to achieve high quality “light manufacturing, warehousing and distribution”⁷ uses, preservation of industrial land for high quality developments, and to discourage incompatible uses from locating near one another.

The North Natomas retail analysis prepared by ERA recommends “the city should take a longer look at the regional retail opportunities which may lie before it at larger properties along I-80. Such future retail, if approved, should possess significant differentiation from power centers and from community shopping centers such that it truly does draw from the Sacramento region.”⁸ The Proposed Project includes a retail component and employment center uses consistent with the NNCP. The development of the Proposed Project in this area would fulfill the City’s goal of providing a use that would draw from the larger Sacramento region. It includes a larger regional retail component designed to provide a combination of value-driven “big box” commercial, small pad retail, and commercial/office uses. The Proposed Project would be considered a regional shopping center similar to the adjacent Natomas Marketplace project. The Retail Market Demand and Allocation in the North Natomas Area report prepared by ERA states, “...the clustering of large home improvement stores, value priced department stores, consumer electronics and entertainment goods, and clusters of fast food and medium-scale restaurants, which are common hallmarks of power centers, tend to dilute the convenience positioning of community-scale centers by competing directly across goods lines with the goods and services usually available in [smaller] community centers.”⁹ The ERA report recommends that desirable and differentiated true regional retail specialties be selected for Natomas area freeway footages. The Proposed Project appears to satisfy the concept of a “differentiated regional retail market” because it includes a regional retail component, and is hoping to attract a mix of retailers similar to what may be proposed within other parts of the NNCP. However, at this time the specific mix of retail uses is not known.

If the project applicant is not successful in securing a “unique” tenant it is likely that the retail uses that would be developed would be similar to what exists in the nearby Natomas Marketplace project and could ultimately compete with other future retail projects proposed within the NNCP. If this were to occur it could potentially render other sites within the NNCP designated for similar retail uses non-viable because it would draw customers to this location.

6 North Natomas Community Plan, May 1994, page 19.

7 North Natomas Community Plan, May 1994, page 30.

8 Economic Research Associates, *Regional Market Demand and Allocation in the North Natomas Area of the City of Sacramento, California*, revised March 20, 2000, page II-3.

9 Economic Research Associates, *Regional Market Demand and Allocation in the North Natomas Area of the City of Sacramento, California*, revised March 20, 2000, page IV-2.

6. POPULATION, EMPLOYMENT AND HOUSING

6.0 POPULATION, EMPLOYMENT, AND HOUSING

INTRODUCTION

This chapter of the EIR describes the existing population, employment, and housing characteristics of the project area, the City of Sacramento and the County of Sacramento. This chapter also describes and evaluates the anticipated changes to population, employment, and housing in the project area that could result from the anticipated buildout of the proposed Promenade at Natomas project.

CEQA directs that the issues of population growth, housing demand and employment opportunities be considered in an EIR only to the extent that they would result in secondary or indirect adverse impacts on the physical environment. Section 15382 of the CEQA Guidelines defines “significant effect on the environment” as follows:

“Significant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment [emphasis added]. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

The direction for the treatment of economic and social effects is reiterated in section 15131(a) of the CEQA Guidelines:

Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

Therefore, this chapter does not identify environmental impacts and mitigation measures, but rather focuses on the effects that the Proposed Project could have on the City’s job/housing balance. Physical environmental impacts (e.g., traffic and circulation, air quality, and noise) that could result from the Proposed Project or alternatives are not addressed in this chapter but in the appropriate technical sections of Chapter 7 of this EIR.

The NOP(s) and the Initial Study (see Appendices A, B, and C in Volume II of the Promenade at Natomas/Sacramento Auto Loop Project DEIR) previously prepared for the Promenade at Natomas/Sacramento Auto Loop project determined that the EIR would address the existing and planned population and housing characteristics of the project site and surrounding area and the project’s relation to the jobs-housing balance within the NNCP. The Initial Study determined that,

displaced. Therefore, construction of replacement housing elsewhere would not be necessary. Responses to the NOP(s) (July 2000 or September 2002) for the Proposed Project did not raise issues associated with population, employment or housing. Because the revised retail project is very similar to what was previously analyzed a third NOP was not required. However, the findings in the Initial Study are still relevant to the revised retail project (Proposed Project).

ENVIRONMENTAL SETTING

The NNCP area is designated in the City's General Plan to be the City's major growth area for new housing and employment opportunities. At full buildout (year 2016), the NNCP area is projected to account for about 35 percent of new housing and 30 percent of the new jobs in the City.¹ The jobs-housing balance is projected to be 62.3 percent for the entire NNCP area and 70.4 percent for the portion of the NNCP area within the City of Sacramento.²

See Table 6-1 for the number of jobs to be generated by development of the site in accordance with the existing land use designations. These designations for the Proposed Project site were used in the calculation of the jobs-housing balance for the entire NNCP.

Existing Land Use	Acres	Number of Jobs Generated by Land Use ¹
Employment Center 50	30	1,330
Light Industrial	96.4	1,550
Total	126.4	2,880

¹ Based on factors of 20 employees per acre for light industrial, 30 employees per acre for retail and 300 sf per employee for Employment Center uses (used in the NNCP).
Source: See Table page 4-8.

Population

Existing and Projected County Populations

The Proposed Project site is bounded on the north and east by the County of Sacramento. According to the Year 2000 Census, the County had a population of 1,223,499.³ The population is expected to rise to 1,436,286 in year 2010 and to 1,651,765 in year 2020.⁴

- 1 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 2.
- 2 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, pages 10 and 11.
- 3 California Department of Finance Website: [http://www.dof.ca.gov/HTML/DEMOGRAP/State-County Summary](http://www.dof.ca.gov/HTML/DEMOGRAP/State-County%20Summary), website accessed 4/11/02.
- 4 California Department of Finance Website: <http://www.dof.ca.gov/HTML/DEMOGRAP/projco.pdf>, website accessed 4/11/02.

Existing and Projected City Populations

Sacramento is the most populated incorporated city in Sacramento County. According to the Year 2000 Census, the population of the City of Sacramento was 407,018.⁵ By year 2010, the population of the City of Sacramento is expected to rise to approximately 485,420 persons and to 523,200 persons for the year 2020.⁶

Existing and Projected NNCP Area Populations

North Natomas is the new growth area of the City of Sacramento and currently is on the crest of a major growth period.⁷ While the population and housing in the area were stable in the recent past, in the late 1990's the population began to grow significantly, as evidenced by projected populations. In 1998, the resident population of the NNCP area was 557 people. In year 2022, the NNCP area is projected to have a population of 57,371 residents,⁸ with buildout by year 2016.

Housing

Existing and Projected County and City Housing

In 2000, the number of dwelling units in the County was approximately 467,379.⁹ The projected number of dwelling units for the Year 2010 is 567,740 and 641,512 for 2020.¹⁰

In 2000, the number of dwelling units of the City of Sacramento was estimated to be 159,894. For the year 2010, the number of dwelling units is expected to rise to approximately 188,777 and 204,349 for the year 2020.¹¹

Existing and Projected NNCP Area Housing

The NNCP area had approximately 292 dwelling units in 1998.¹² Substantial residential construction is currently taking place in the NNCP area and the number of residential units is expected to rise to 23,985 by year 2022,¹³ with buildout by year 2016.

5 U.S. Census Bureau, Census 2000, *Table DP-1, Profile of General Demographic Characteristics:2000, Geographic Area: Sacramento City, California.*

6 Sacramento Council of Governments Website:
<http://www.sacog.org/demographics/proj2001/pdf/cities/saccity.pdf>.

7 City of Sacramento Website: <http://cityofsacramento.org/planning/geoarea/phdata/nnatomas.htm>, website accessed 2/22/01.

8 City of Sacramento Website: <http://cityofsacramento.org/planning/geoarea/phdata/nnatomas.htm>, website accessed 2/22/01.

9 Sacramento Council of Governments Website:
<http://www.sacog.org/demographics/pophsg/cities/sac/Sacr.htm>.

10 Sacramento Council of Governments Website:
<http://www.sacog.org/demographics/proj2001/pdf/cities/sac.pdf>.

11 Sacramento Council of Governments Website:
<http://www.sacog.org/demographics/proj2001/pdf/cities/saccity.pdf>.

12 City of Sacramento Website: http://www.cityofsacramento.org/planning/geoarea/phdata/housing_cpa.htm.

13 City of Sacramento Website: http://www.cityofsacramento.org/planning/geoarea/phdata/housing_cpa.htm.

Employment

Existing and Projected County and City Employment

In 1999, Sacramento County had a total of 542,104 jobs. By year 2010, employment in the County is expected to rise to approximately 694,531 jobs and to 792,494 jobs by year 2020.¹⁴

In 2000, the existing number of jobs in the City of Sacramento was estimated to be 268,336. By year 2010, employment in the City is expected to rise to approximately 334,346 jobs and to 380,049 jobs by year 2020.¹⁵

Existing and Projected NNCP Area Employment

At buildout, the NNCP area is projected to have 72,016 jobs generated by development of 2,195 net acres of land designated for employee-intensive uses.^{16,17} As of April 2001, 1.2 million sf of employment center uses were built or under construction and 685,000 sf of commercial uses were built or under construction.¹⁸ Using a conservative estimate of 350 sf per employee¹⁹ for the employment center uses and 12,000 sf of development per net acre (30 employees per acre) for commercial uses,²⁰ there are approximately 5,140 existing jobs in the NNCP area.

Jobs to Housing Relationship

The jobs to housing relationship is often referred to as the jobs-housing balance and, in the City of Sacramento, represents the ratio of housed workers to jobs (number of housed workers divided by number of jobs). Jobs and housing are technically in balance when a region has enough employment opportunities for most of the people who live there and enough housing opportunities for most of the people who work there. Ideally, jobs-housing balance would include other factors, such as a match between a sub-region's price of housing and the household income of those who work there. This would assure not only a numerical match of jobs and housing, but also an economic match in type of jobs and housing.

The development of a balance between the jobs within a region and the ability of those jobs to support the households within a reasonable distance is difficult to achieve, and depends entirely on the affordability of the housing, the quality of the jobs, size of the region, the availability of transit, and the characteristics of the future employees and residents of a community. An imbalance between jobs and housing can result in increased air pollution, increased traffic congestion, longer commute times for employed households, and increased costs to local government.

14 Website for Sacramento Council of Governments:
<http://www.sacog.org/demographics/proj2001/pdf/cities/sac.pdf>.

15 Website for Sacramento Council of Governments:
<http://www.sacog.org/demographics/proj2001/pdf/cities/saccity.pdf>, website accessed 3/15/01.

16 The projected number of employees is based on employees generated by major employers and does not include educational and institutional employees.

17 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 10.

18 City of Sacramento Website:
http://www.cityofsacramento.org/planning/geoarea/area4/natomas/proj_non.htm, website accessed 2/18/02.

19 City of Sacramento, North Natomas Community Plan, page 21.

20 City of Sacramento, North Natomas Community Plan, page 26.

Although the job-housing balance is a common planning tool, it is limited in its usefulness because it does not attempt to characterize the types of jobs or housing. For example, the ratio does not take into account the wage level of the employment opportunities, the affordability of the housing units or a person's individual choice of where to live and/or work. A region that is characterized as having an adequate jobs-housing ratio could have mostly low-wage jobs and up-scale housing. The result would be employees commuting to the region and residents commuting to jobs outside the region, thereby exacerbating traffic and air quality problems.

As previously stated, the NNCP established a policy of a community-wide jobs-housing balance of 62.3 percent,²¹ with a minimum ratio of 70.4 percent in the portion of the plan area that is within the City limits.²² As shown in Table 6-2, the land uses proposed at buildout of the NNCP have a higher jobs-housing balance for the portion of the plan area within the City of Sacramento than for the entire NNCP area.

Entire Community Plan Area			
Dwelling Units	Housed Workers	Jobs	Jobs-housing Ratio
33,527	44,899	72,016	62.3%
City Portion of the Community Plan Area			
29,898	40,362	57,342	70.4%

1. Based on proposed land uses for the North Natomas Community Plan, amended April 16, 1996, Pages 10 and 11.

REGULATORY CONTEXT

Federal and State

There are no specific federal or State regulations pertinent to this chapter.

Local

The following guiding and implementing policies from the NNCP are applicable to the Proposed Project.

North Natomas Community Plan

Land Use

Residential Guiding Policy F:

Maintain a minimum jobs-housing ratio of 58 percent for the Community Plan area and 66 percent for the city portion of the Community Plan area. (Note: The community wide jobs-housing ratio was revised to 62 percent in the 1996 amendment to the Community Plan.)

21 City of Sacramento, Draft North Natomas Community Plan, amended April 16, 1996, page 3.

22 City of Sacramento, Draft North Natomas Community Plan, amended April 16, 1996, page 15.

Residential Implementing Policy:

The impact on the jobs-housing ratio of any proposed rezone should be analyzed and the community wide jobs-housing ratio maintained prior to the approval of any rezone.

Employment Center Guiding Policy F:

Maintain or improve the 1986 jobs-housing ratio of 66 percent in the City portion of the North Natomas Community Plan area.

Employment Center Implementing Policy:

The total number of employees projected for an EC Planned Unit Development (PUD) cannot be exceeded unless a) housing opportunity is provided for each new employee generated over the projected number (using a formula based on the number of workers per household); and b) additional mitigation measures are provided by the developer generating the new workers to negate the incremental environmental impacts (such as traffic) of the additional employees.²³

POPULATION, EMPLOYMENT, AND HOUSING EVALUATION

Method of Analysis

The Proposed Project is discussed in regards to changes to population, housing, and employment numbers from existing conditions and the resulting changes to the jobs-housing balance for Sacramento County, the City of Sacramento, and the NNCP area.

Housing

In the NNCP area, the number of employees per dwelling unit used to calculate housed workers is 1.35.²⁴

Employment

The employment projections are based on the proposed land uses for the Proposed Project and the City's employee generation rates for those proposed land uses. The following employment generation rates were assumed:

Commercial	30 employees per acre ²⁵
Employment Center 50 (EC-50)	300 square feet per employee ²⁶

If the square footage of commercial development is not known, the gross square footage of commercial buildings is calculated to be 12,000 sf per net acre of development.²⁷

Table 6-3 shows the number of jobs generated by the Proposed Project. Development of the Proposed Project in Area 1 would generate 504,000 sf of Employment Center uses. Under this land use, 1,680 jobs would be created. Areas 2 and 3 would develop a total of 751,000 sf of Regional

23 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 21.
 24 City of Sacramento, Draft North Natomas Community Plan, amended April 16, 1996, page 10.
 25 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 26.
 26 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 21.
 27 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 26.

TABLE 6-3

**PROPOSED LAND USES AND DEVELOPMENT POTENTIAL
OF THE PROPOSED PROJECT**

	Site Area (sq. ft.)	Gross Square Feet per Employee	Number of Jobs Generated
Employment Center	504,000	300	1,680
Regional Commercial	77,000	300	257
Regional Commercial	674,000	300	2,247
Total			4,184

Note: If the square footage or type of development for the Proposed Project is significantly revised, new figures for development potential need to be generated and a new jobs-housing balance calculated.

1. City of Sacramento employee generation rates (1986 to 2006 *General Plan for Sacramento*, released January 16, 1987), Section 3-12.
2. Auto mall employment rates were determined by surveying National Automobile Dealer's Association (NADA) data and by contacting auto dealerships likely to be placed in an automall for staffing information. This information is from Aaron Anderson, City of Sacramento Economic Development Department, written communication to Grace Hovey, City of Sacramento Planning Department, December 12, 2002.
3. Source: See Table 7.2-9 Section 7.2, Transportation and Circulation of this DEIR for square footages used for trip generation.

Commercial uses and would create a total of 2,504 jobs. The project would generate, at full buildout, a total of 4,184 jobs. Potential businesses under the proposed land uses could include offices; high-tech uses; medical, educational, and child care facilities; and support services such as retail.

6-1 Population and Housing.

The Proposed Project does not propose the development of residential uses nor would they remove existing residential units. The project site is not currently designated for residential development, so the proposed General Plan and Community Plan Amendments associated with the project would not affect the amount of land designated for future residential development in the NNCP area. Therefore, the Proposed would not directly affect the population or housing stock within the NNCP area.

See Chapter 8, CEQA Considerations, for a discussion of the growth-inducing impacts resulting from the Proposed Project.

6-2 Jobs-housing Balance.

The Promenade at Natomas project proposes the maximum square footage of development of land uses as shown on Table 6-3. The calculations of the resulting jobs-housing balances are based upon the proposed maximum amount of development and development types.

Under the Proposed project approximately 4,184 jobs would be generated at full buildout. (See Table 6-3.) This analysis assumes that the jobs generated by the Proposed Project would be in addition to existing jobs within the County, City, and NNCP. Table 6-4 shows the jobs-housing balances for the Proposed Project.

	Existing Land Use Designations	Proposed Project
County (existing)		
Housed Workers	630,962	630,962
Jobs (employees)	542,104	542,104
Additional Jobs	3,604	4,184
Jobs Total	545,708	546,288
Ratio	1.16	1.15
City (existing)		
Housed workers	215,857	215,857
Jobs	268,336	268,336
Additional jobs	3,604	4,184
Jobs Total	271,940	272,520
Ratio	0.79	0.79
NNCP (under buildout)		
Housed Workers	44,897	44,897
Jobs ¹	72,016	72,016
Additional jobs	0	580
Jobs Total	72,016	72,596
Ratio	0.62	0.62

¹ This total for the NNCP included buildout of the area under NNCP designations, so the "additional jobs" in this category is the number of jobs OVER the 3,604 assumed in the NNCP. Numbers in parenthesis is the reduction in number of jobs (e.g., below 3,604) that would be generated by the alternative.

The Proposed Project would generate 4,184 jobs, compared to 3,604 jobs projected for development of the site in accordance with existing NNCP land use designations, shown in Table 6-1.

County

In year 2000, the County had approximately 467,379 dwelling units and approximately 630,962 housed workers (467,379 x 1.35). In 1999, the County had approximately 542,104 jobs. Using the City's ratio of housed workers divided by jobs, the jobs-housing balance was therefore approximately 1.16 percent (630,962/542,104), which would indicate that employees are commuting out of the County. Under the Proposed Project 4,184 jobs would be added to the approximately 542,104 existing jobs, for a total of 546,288. The resulting jobs-housing balance would be approximately 1.15 percent (630,962/546,288), thereby also slightly helping to bring the County into balance.

City

In year 2000, the City of Sacramento had approximately 159,894 dwelling units and approximately 268,336 jobs. Using 1.35 employees per dwelling unit to calculate housed workers, the City would have approximately 215,857 housed workers (159,894 x 1.35). The jobs-housing balance would therefore be 80 percent (215,857/268,336). Under the Proposed Project, adding the 4,184 jobs proposed to the existing 268,336 jobs would result

in 272,520 jobs. Therefore, the jobs-housing balance would also be 79 percent (215,857/272,520), thereby also slightly decreasing the jobs-housing balance in the City and indicating that employees are commuting into the City.

NNCP

As shown on Table 6-1, the number of jobs projected for development of the Proposed Project site in accordance with the existing land use designations under the NNCP would be 3,604. Therefore, the Proposed Project would add 580 jobs to the NNCP under the Proposed Project in addition to those already projected in the NNCP.

At buildout (year 2016) of the entire NNCP, it is anticipated that the proposed land uses would generate 33,257 dwelling units and approximately 44,897 housed workers (33,257 x 1.35) and 72,016 jobs,²⁸ resulting in a jobs-housing balance of 62.3 percent (44,897/72,016) for the entire NNCP. Adding the 580 additional jobs would result in a total of 72,596 jobs and a jobs-housing balance of 62 percent (44,897/72,596). Therefore, development of Scenario A would result in the same jobs/housing balance and Scenario B would slightly decrease the jobs-housing balance for the entire NNCP area. This indicates that more workers would commute into the NNCP area because there would be more jobs than housed workers.

At buildout of the portion of the NNCP area within the City, it is anticipated that the proposed land uses would generate 29,898 dwelling units and approximately 40,362 housed workers (29,898 x 1.35) and 57,342 jobs,²⁹ resulting in a jobs-housing balance of 70.4 percent (40,362/57,342) for the portion of the NNCP within the City. Under the Proposed Project, the 580 jobs proposed by the project would result in a jobs-housing balance of 70 percent (40,362/57,922) for the City portion of the NNCP. Therefore, development of the Proposed Project would increase the job-housing balance for the portion of the NNCP area within the City. This would indicate more workers would commute into the City-portion of the NNCP area, but less than under buildout of the NNCP area within the City's current General Plan designations.

The Proposed Project does not include residential development and, therefore, would cause the NNCP to fall below the jobs-housing goals for the Plan Area within the City. Projects that propose to vary from the existing land use plan must improve the overall jobs-housing balance in the community or otherwise mitigate any impact to the target ratio.³⁰

28 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 10.

29 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 11.

30 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 6.

REFERENCES

California Department of Finance Website: <http://www.dof.ca.gov>.

City of Sacramento, North Natomas Community Plan, amended April 16, 1996.

City of Sacramento website: <http://cityofsacramento.org>.

Sacramento Council of Governments website: <http://www.sacog.org>.

U.S. Census Bureau, Census 2000, Table DP-1, Profile of General Demographic Characteristics:
2000, Geographic Area: Sacramento City, California.

**7. ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION
MEASURES**



7.1 Introduction to the Analysis



7.1 INTRODUCTION TO THE ANALYSIS

PURPOSE OF THE ANALYSIS

An EIR analyzes the environmental effects of a Proposed Project, indicates ways to reduce or avoid potential environmental damage resulting from the project, and identifies alternatives to the proposed action. The purpose of the EIR is to provide the public and decision-makers with an objective analysis of these issues. The EIR does not recommend either approval or denial of the project, but provides information to aid in the decision-making process, taking the environmental consequences of the Proposed Project into account. In accordance with the CEQA Guidelines, the EIR includes the following analytical steps:

- Identification of existing conditions in and around the project site (Environmental Setting);
- Identification of the applicable federal, state and local rules, regulations, and laws (Regulatory Context);
- Analysis of the significant environmental impacts of the Proposed Project and the alternatives, including identification of thresholds of significance, for both project-specific and cumulative impacts, by resource issue area (Impacts and Mitigation Measures);
- Disclosure of any significant environmental effects of the Proposed Project that cannot be avoided if the project is implemented; and
- Development of mitigation measures to avoid or minimize the significant effects of the Proposed Project and the alternatives. Mitigation measures should be developed that can be reasonably expected to reduce significant adverse impacts of development to a less-than-significant level. Mitigation measures must be specific and must be written to be incorporated into a Mitigation Monitoring Plan (MMP).

SCOPE OF THE ENVIRONMENTAL IMPACT REPORT

This document is a project-specific EIR as defined in CEQA Guidelines section 15168 (please see the discussion in Chapter 1, Introduction). Chapter 7 evaluates the environmental effects of the Proposed Project at a project-specific level.

As discussed in Chapter 3, Project Description, this RDEIR assumes that, because the project includes a less intense development project than what was evaluated for Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR, impacts associated with the Proposed Project would be less severe. Therefore, unless noted, this RDEIR assumes the same impacts and

mitigation measures as those identified for Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR.

Background

The following environmental effects are discussed in Sections 7.2 through 7.9 of this EIR.

- Transportation and Circulation;
- Air Quality;
- Noise;
- Public Services;
- Public Health/Hazards;
- Hydrology and Water Quality;
- Biological Resources; and
- Cultural Resources.

In addition, section 15125(b) of the CEQA Guidelines requires that the existing land use setting of an EIR discuss any inconsistencies that result when the Proposed Project is compared with adopted land use plans. This land use discussion is presented in Chapter 5, Land Use, Planning and Socioeconomic Effects, of this EIR and is not treated as a physical environmental impact. The Population, Employment and Housing discussion is presented in Chapter 6 of this EIR and is not treated as a physical environmental impact.

Issues Not Included in This REIR

As discussed in Chapter 1, Introduction, this EIR is focused from the Initial Study, provided as Appendices A and B in Volume II of the Promenade at Natomas/Sacramento Auto Loop DEIR. Several issues were determined by the Initial Study to be less than significant. These issues, which are identified below, were determined to result in a less-than-significant impact and are not discussed in this REIR. Because the revised retail project is similar to what was analyzed previously under Scenario B, the findings included in the Initial Study did not change.

- Agricultural Resources;
- Mineral Resources;
- Aesthetics; and
- Schools and Recreation.

EVALUATION OF ALTERNATIVES IN THE EIR

As required by section 15126(6a) of the CEQA Guidelines, this EIR evaluates the comparative impacts of a “range of reasonable alternatives to the project.” This EIR considers four alternatives for the Proposed Project. The alternatives, described in Chapter 4, include the CEQA mandated “No Project” Alternative which would allow the area to remain in its current use. The effects of the Proposed Project and alternatives are discussed for each impact.

The following are the names used to identify the project and project alternatives:

- Proposed Project, The Promenade at Natomas
- Alternative 1, No Project/No Development
- Alternative 2, Community Plan Buildout
- Alternative 3, Retail/Mixed Use
- Alternative 4, Offsite-Reed Avenue

CUMULATIVE IMPACTS

According to CEQA “cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines, section 15355). CEQA requires that cumulative impacts be discussed when the “project’s incremental effect is cumulatively considerable” (CEQA Guidelines, section 15130 (a)). As discussed in Chapter 7, the Proposed Project would result in cumulative impacts to air quality, noise, public services, hydrology and water quality (Alternative 4 only), biological resources, and cultural resources (Alternative 4 only) that are significant and unavoidable.

PRESENTATION OF THE IMPACT ANALYSIS

Chapter 7 is divided into nine technical sections that provide the environmental setting, regulatory setting, standards of significance, and impacts and mitigation measures for significant impacts. A cumulative analysis is included at the end of each section. Each section begins with a description of the Proposed Project's environmental setting and regulatory setting as it pertains to a particular issue. The environmental setting provides a baseline for assessing the environmental impacts of the Proposed Project. The setting discussion addresses the conditions that exist prior to implementation of the Proposed Project.

A standard of significance is identified for each environmental category to determine if the development of the Proposed Project could result in a significant environmental impact when evaluated against the environmental setting. This standard of significance varies depending on the environmental category.

Impacts and feasible mitigation measures are presented, where appropriate, for each environmental category. The significance of the project and cumulative impacts are listed in one of three ways throughout the discussion: (1) no impact, (2) less than significant, or (3) significant. Feasible mitigation measures are always identified, if available, for those impacts found to be significant, but are generally not presented for those found to be less than significant. An impact will be considered significant and unavoidable if there are no feasible mitigation measures available to reduce the impact to a less-than-significant level. Each mitigation measure presented in this RDEIR is considered feasible from a technological standpoint. The impacts and mitigations listed in this RDEIR are numbered consecutively.

Mitigation measures and the degree of relief pertinent to each individual impact appears after the impact statement. An example of the format is shown below.

Impact

X-1 Statement of Impact in bold type.

Discussion of impact in paragraph format. The discussion includes the level of significance of impact, without mitigation.

Mitigation

X-1 Repeat Statement of Impact in bold type.

If mitigation is not required the following statement will appear:

“No mitigation would be required for the Proposed Project.”

If mitigation is required, recommended mitigation measures will be stated numbered in consecutive order identified as the Section number, as shown below. This statement will indicate the level of significance after mitigation.

7.2-1 *Text of the mitigation measure in italic type.*

7.2 Transportation and Circulation

7.2 TRANSPORTATION AND CIRCULATION

INTRODUCTION

This section is based on the Transportation and Circulation section prepared for the Promenade at Natomas/Sacramento Auto Loop project DEIR (April 2003) prepared by Dowling Associates, Inc. and summarizes the effects on the near-term and future (2025) transportation and circulation system resulting from vehicle trips associated with the Proposed Project.

The supplemental transportation analysis is provided as Appendix D in Volume III of the Promenade at Natomas/Sacramento Auto Loop Project DEIR (separately bound) along with figures showing the site plans for the Proposed Project and project alternatives. The model outputs are bound separately as Volume III of the DEIR. Both Volume II and III are available for review at the City of Sacramento Planning Department, 1231 I Street, Room 300. This transportation discussion prepared by Dowling Associates, Inc., addresses impacts identified in the subject analysis.

As discussed previously, since the Promenade at Natomas/Sacramento Auto Loop DEIR was publicly circulated in April and May 2003, the project applicant has since revised the project and eliminated the automall option and revised the proposed retail component (also known as PPB in the Promenade at Natomas/Sacramento Auto Loop DEIR) to include a smaller project. It is anticipated that the change/reduction in square footage would not significantly affect the conclusions of the analysis, because it is generally within the tolerance of the traffic model used to determine future traffic volumes.

This section presents the analysis for PPB analyzed in the Promenade at Natomas/Sacramento Auto Loop DEIR. This strategy is acceptable for the Proposed Project because PPB would generate more trips than the Proposed Project during the work week and essentially the same number of trips on Saturday; a comparison of trip generation from the Proposed Project and the previously analyzed retail project (PPB) is presented in Table 7.2-9. As a result, the Proposed Project would generate no greater impacts to the transportation system than the previous project (PPB).

In view of the above, no new or additional traffic impacts of the Proposed Project are anticipated over and above the impacts that are identified for PPB analyzed in the Promenade at Natomas/Sacramento Auto Loop DEIR (April 2003). The relevant portions of the April 2003 DEIR (Section 7.2, Transportation and Circulation) are reproduced in this RDEIR with revisions where appropriate. A supplemental review will evaluate any need for revised lane configurations of the intersections within the project site in view of the re-location of the land uses internal to the site; the streets within the project site will be designed in accordance with the City standards. For the reasons mentioned above, the same mitigation measures that were identified for PPB in the Promenade at Natomas/Sacramento Auto Loop DEIR corresponding to the impacts outside the project site will be implemented for the Proposed Project.

ENVIRONMENTAL SETTING

The Proposed Project consists of a proposed mixed-use development located on a 126.4-acre site near the intersection of Truxel Road and Gateway Park Boulevard. The site is bounded on the west by Gateway Park Boulevard and on the south by I-80 (see Figure 7.2-1). The Natomas Marketplace Shopping Center is located to the southwest across Truxel Road.

The prior DEIR evaluated the transportation and circulation impacts for two development scenarios:

- Development Scenario A: Sacramento Auto Loop (PPA) and
- Development Scenario B: Retail Project (PPB).

For the Proposed Project, access to the site would still be provided from an extension of North Freeway Boulevard, which will connect the existing end of North Freeway Boulevard to Gateway Park Boulevard through the Proposed Project site. The design of the North Freeway Boulevard extension and intersections will be sized according to City standards.

For the Proposed Project, the main project access, serving all traffic movements, would be located on North Freeway Boulevard approximately 950 feet east of Gateway Park Boulevard. A second full-movement access would be located approximately 1000 feet further east on North Freeway Boulevard. A third access, that would serve Area 3 would be located near the east end of the Proposed Project site. Several driveways between the major access locations on North Freeway Boulevard would provide additional access serving right-turning movements only. A right turn only access is proposed on Gateway Boulevard, approximately 220 feet north of North Freeway Boulevard.

The Proposed Project site has been split into three subareas which differ slightly from what was analyzed previously. Area 1 comprises the western portion of the site, Area 2 is the central portion of the site, and Area 3 consists of the northern and southern parcels. However, for the purposes of this analysis, the internal and external circulation and land uses have not changed significantly from what was analyzed under PPB: Retail Project. The major difference is a relocation of several internal land uses, which could reduce impacts identified under PPB, but for the purposes of this analysis the more intense development under PPB is assumed.

All parking for the Proposed Project would be provided on-site.

Existing Conditions

Existing conditions noted in this section represent conditions at the time the first NOP, dated July 10, 2000, was released. While some conditions may have changed during the course of this analysis, such changes would have a nominal affect on the analysis, except where noted.

Lane Configurations and Controls

A set of intersections, freeway ramps, and freeway segments were selected for study based upon the anticipated volume and distributional patterns of project traffic and known locations of operational



Dowling Associates
 PROMENADE AT NATOMAS/
 TRAFFIC IMPACT STUDY



Figure 7.2-1
 PROJECT LOCATON

difficulty. This selection was made in collaboration with the City of Sacramento Department of Public Works Development Services Division staff. The following locations, illustrated in Figure 7.2-2, were studied:

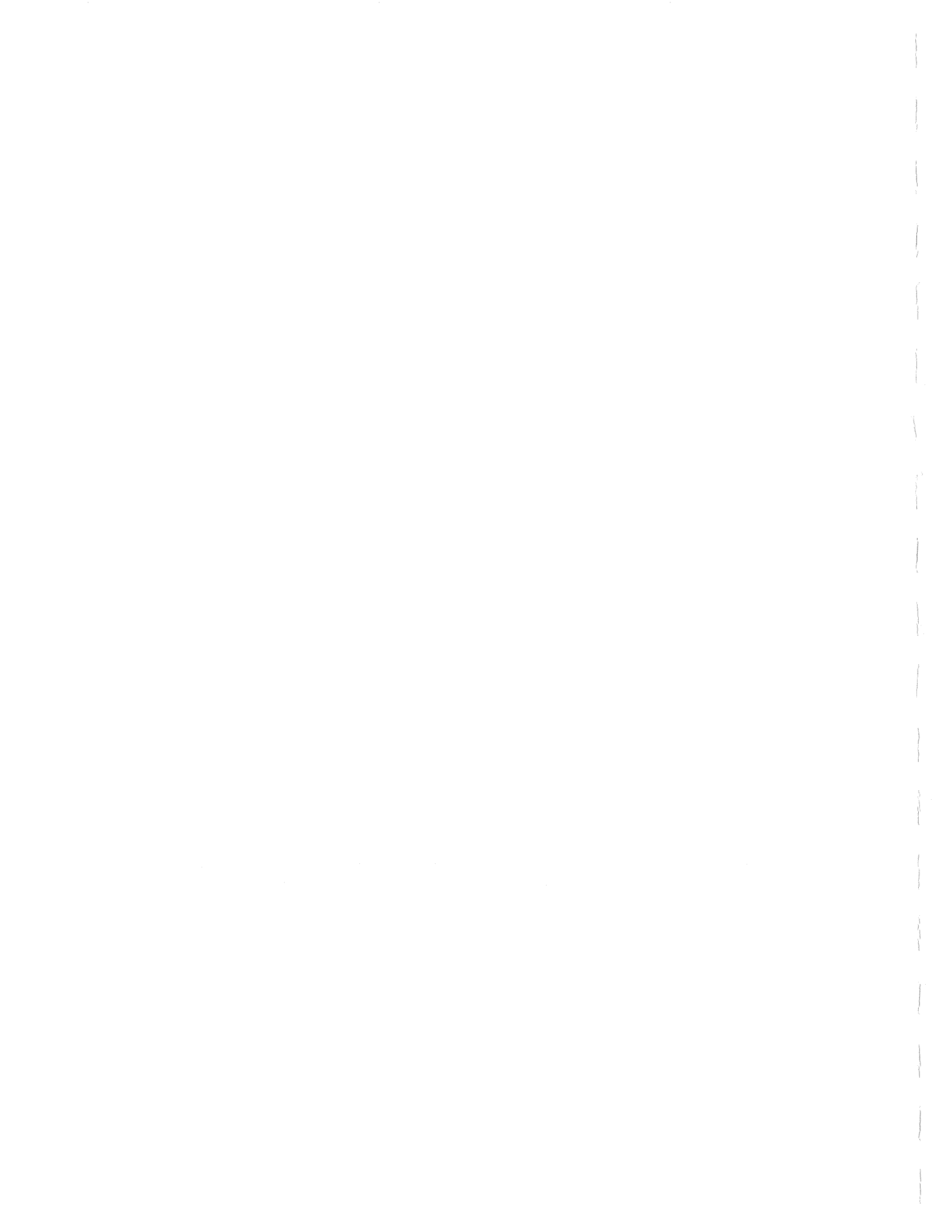
- **Intersections**
 1. Gateway Park Boulevard / Del Paso Road
 2. National Drive / Del Paso Road
 3. Northgate Boulevard / Del Paso Road
 4. Truxel Road / Arena Boulevard
 5. Gateway Park Boulevard / Arena Boulevard / North Market Boulevard
 6. North Market Boulevard / Sierra Point Drive (Hewlett Drive)
 7. North Market Boulevard / National Drive
 8. North Market Boulevard / North Freeway Boulevard
 9. Northgate Boulevard / North Market Boulevard
 10. Gateway Park Boulevard / National Drive (Alternative) / Coke-Raley's Driveway
 11. Truxel Road / Gateway Park Boulevard
 12. Lennane Drive (Halcraft Way) / North Freeway Boulevard
 13. Truxel Road / I-80 Westbound Ramps
 14. Truxel Road / I-80 Eastbound Ramps
 15. Northgate Boulevard / I-80 Westbound Ramps
 16. Northgate Boulevard / I-80 Eastbound Ramps
 17. Truxel Road / San Juan Road
 18. Northgate Boulevard / San Juan Road
 19. Gateway Park Boulevard / North Freeway Boulevard Extension

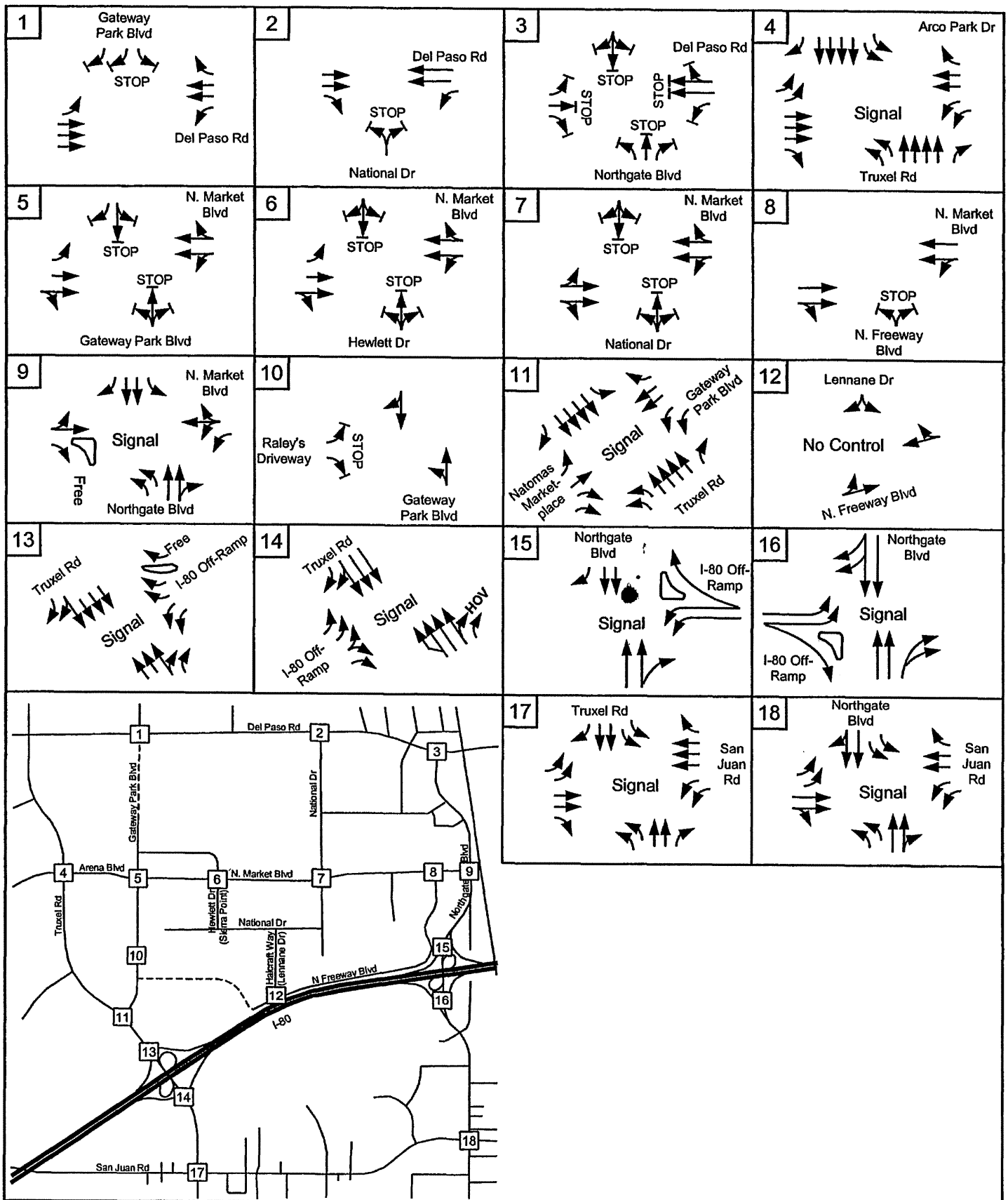
- **Freeway Ramps / Interchanges**
 1. I-80 interchange at Truxel Road
 2. I-80 interchange at Northgate Boulevard

- **Freeway Mainline Sections**
 1. I-80 from I-5 to Truxel Road
 2. I-80 from Truxel Road to Northgate Boulevard
 3. I-80 from Northgate Boulevard to Norwood Avenue

The near-term (baseline no-project) changes to the existing roadway system are shown in Figure 7.2-3. The plan for roadways (baseline plus project) to accommodate the Proposed Project is shown in Figure 7.2-4. Any changes made to the road system since the Notice of Preparation was released would increase capacity at that location. The long-range plan for roadways in the project vicinity (with the Proposed Project in place) is shown in Figure 7.2-5.

Regional automobile access to the site is provided primarily by the freeway system that serves the northern areas of Sacramento. Interstate 80 (I-80) is an east-west facility that is located adjacent to the project site. Access to and from I-80 is provided at Truxel Road (adjacent to the southwest side of the site) and Northgate Boulevard (about 1.5 miles east of the site). Interstate 5 (I-5) is located approximately 1.5 miles west of the site. The nearest access to I-5 is about 2.5 miles to the northwest at the Del Paso Road interchange and via I-80 to the southwest. The Arena Boulevard interchange is anticipated to open in November 2003 and will provide additional access to I-5.



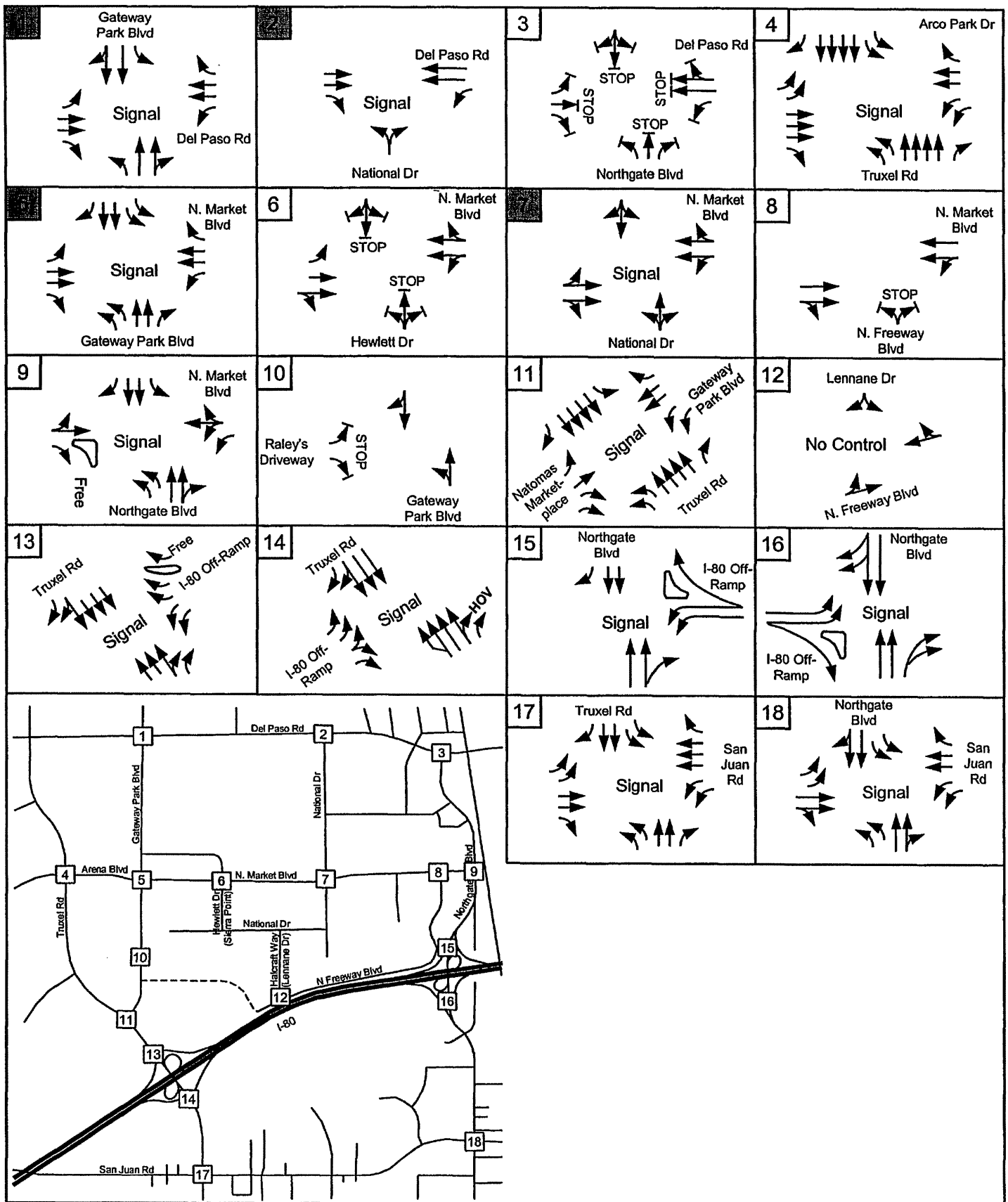


Dowling Associates
PROMENADE AT NATOMAS/
TRAFFIC IMPACT STUDY



Figure 7.2-2
EXISTING
LANES & TRAFFIC CONTROL






Dowling Associates

PROMENADE AT NATOMAS/
TRAFFIC IMPACT STUDY

Legend

 = Lanes or traffic control are different from existing conditions

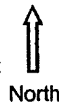
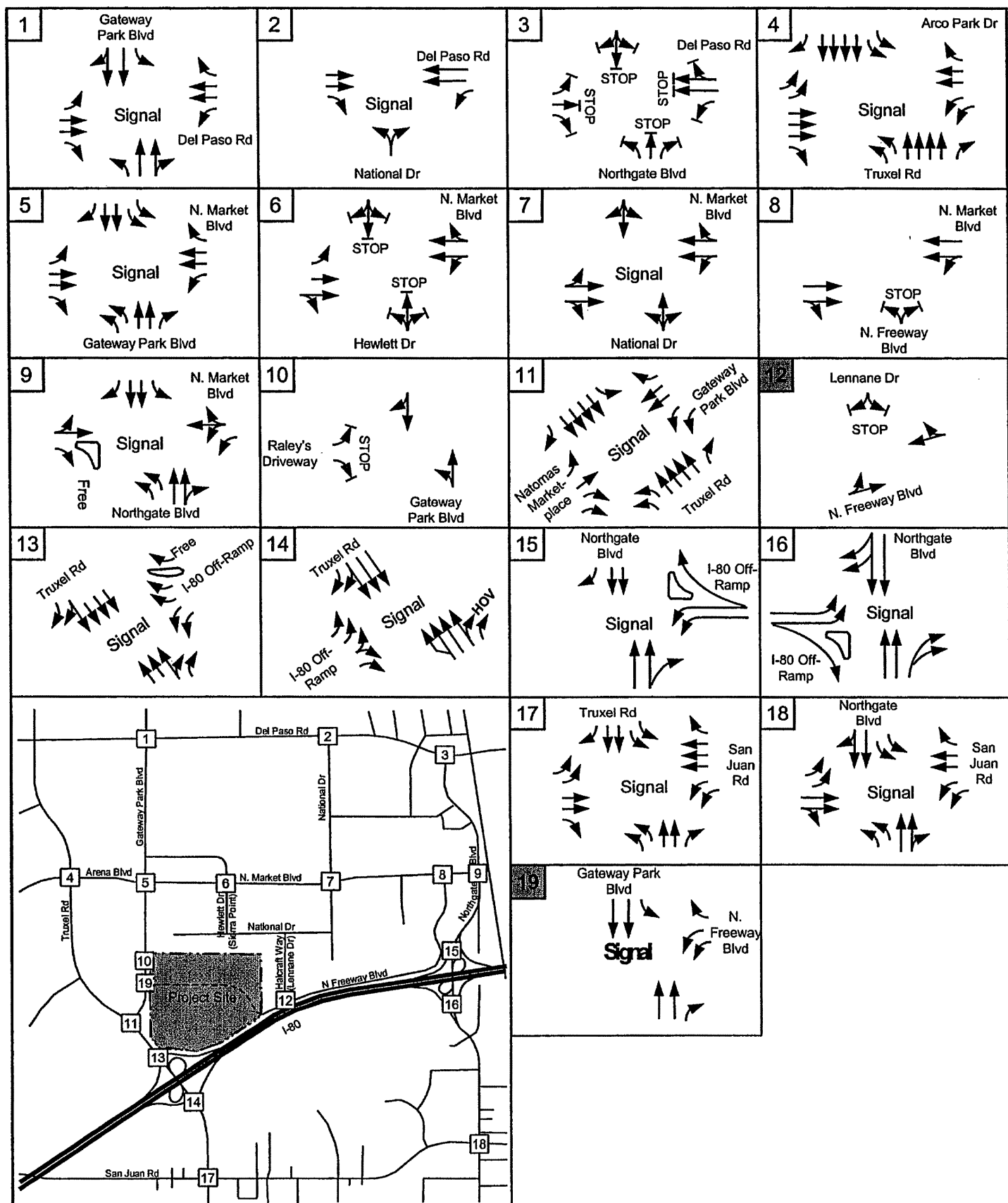


Figure 7.2-3
BASELINE NO-PROJECT
LANES & TRAFFIC CONTROL





Dowling Associates
**PROMENADE AT NATOMAS/
 TRAFFIC IMPACT STUDY**


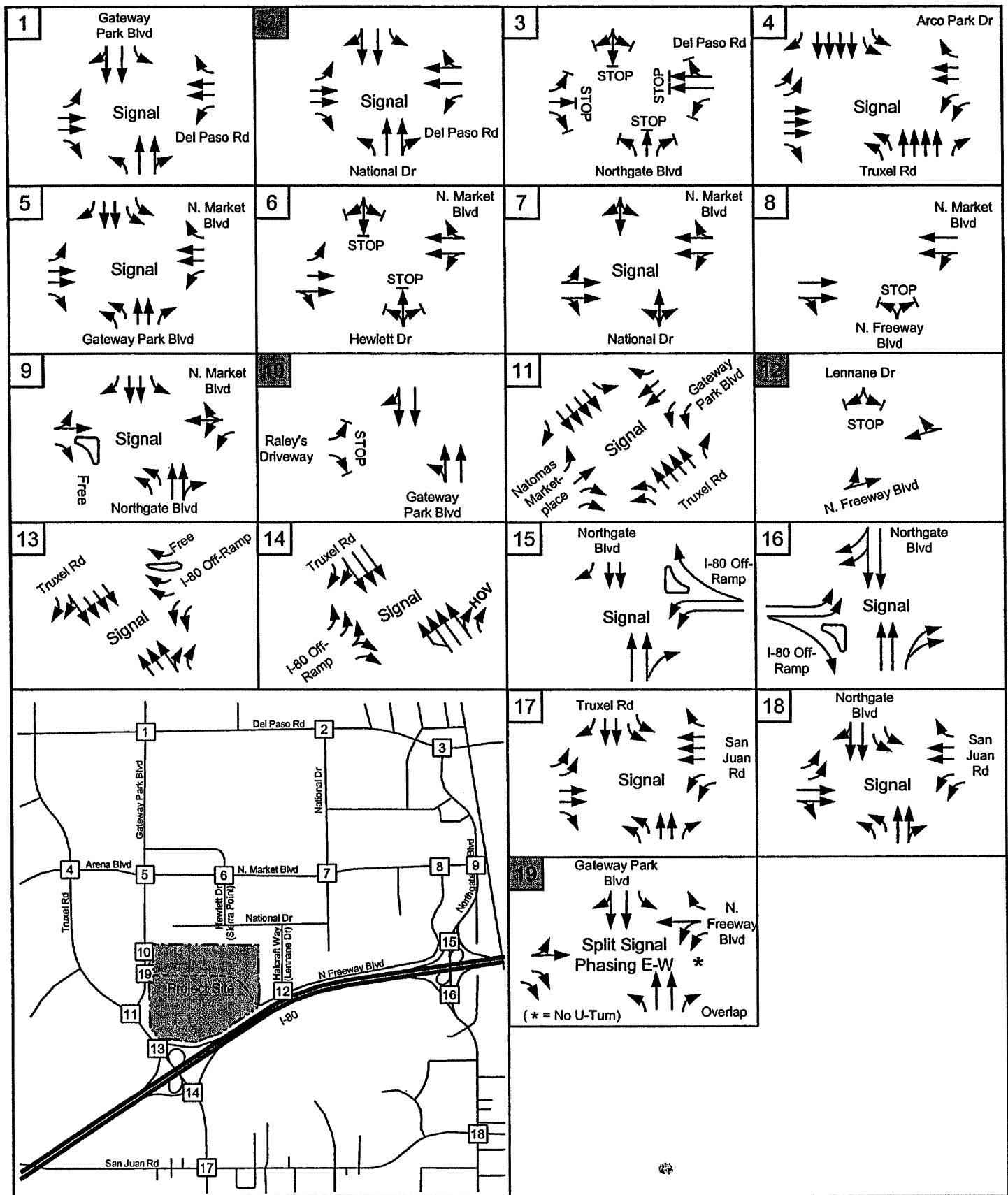
Legend
 = Lanes or traffic control are different from baseline no-project conditions



Figure 7.2-4
BASELINE PLUS PROJECT
LANES & TRAFFIC CONTROL
(PPB & AC)



Dowling Associates
PROMENADE AT NATOMAS/
TRAFFIC IMPACT STUDY


Legend
 = Lanes or traffic control are different from baseline plus project conditions
 Note: For lanes and traffic control for PPA Loop Street intersections, see Figure 7.2-4.

Figure 7.2-5
CUMULATIVE PLUS PROJECT
LANES & TRAFFIC CONTROL
(PPB & AC)

Truxel Road has been constructed to accommodate long-range traffic demand. Truxel Road is an eight-lane arterial roadway with a raised median and controlled access north of I-80 that transitions to six lanes south of I-80 and four lanes south of San Juan Road. A partial cloverleaf intersection provides a connection to I-80. The major intersections along Truxel Road are developed with dual left-turn lanes and separate right turn lanes.

Northgate Boulevard is a four to six lane arterial roadway with turn lanes that provides a second connection to I-80 near the project site. The I-80/Northgate interchange is a partial cloverleaf with loop ramps at its northeast and southwest corners. Northgate Boulevard terminates on its north end at Del Paso Road and on its south end at SR 160.

Del Paso Road connects to I-5 at a partial cloverleaf interchange. At I-5 Del Paso Road is a six-lane arterial that currently transitions to four lanes about one-half mile east of Gateway Park Boulevard. Del Paso Road becomes Main Avenue at Northgate Boulevard and terminates on its east end at Rio Linda Boulevard. A traffic signal will likely be installed at the intersection of Del Paso Road with National Drive before the Proposed Project would be constructed.

North Market Boulevard/Arena Boulevard extends from Northgate Boulevard on the east to Gateway Park Boulevard on the west. West of Gateway Park Boulevard, North Market Boulevard becomes Arena Boulevard. Arena Boulevard terminates on its west end at El Centro Road. An interchange at Arena Boulevard and I-5 is under construction and is anticipated to be operational in November 2003. Presently, North Market Boulevard/Arena Boulevard has four lanes from Northgate Boulevard to Truxel Road and six lanes west of Truxel Road. A signal will be installed at the North Market Boulevard/National Drive intersection before construction of the Proposed Project would begin.

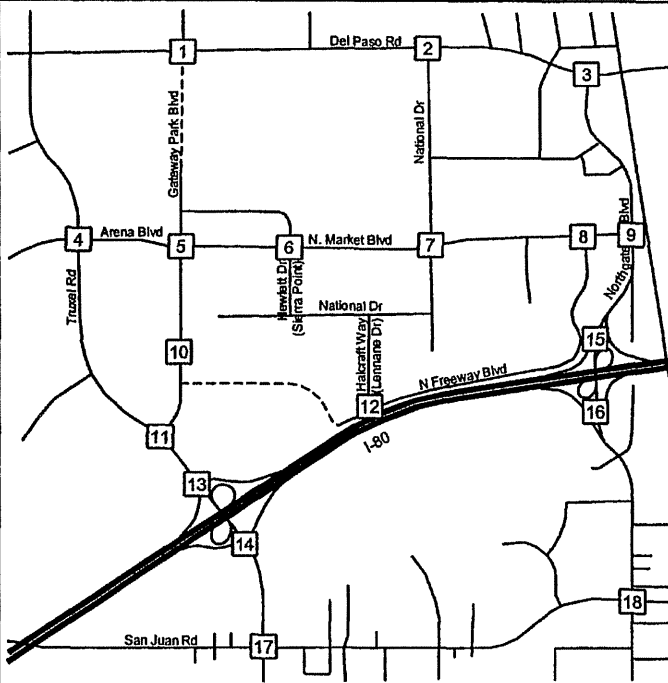
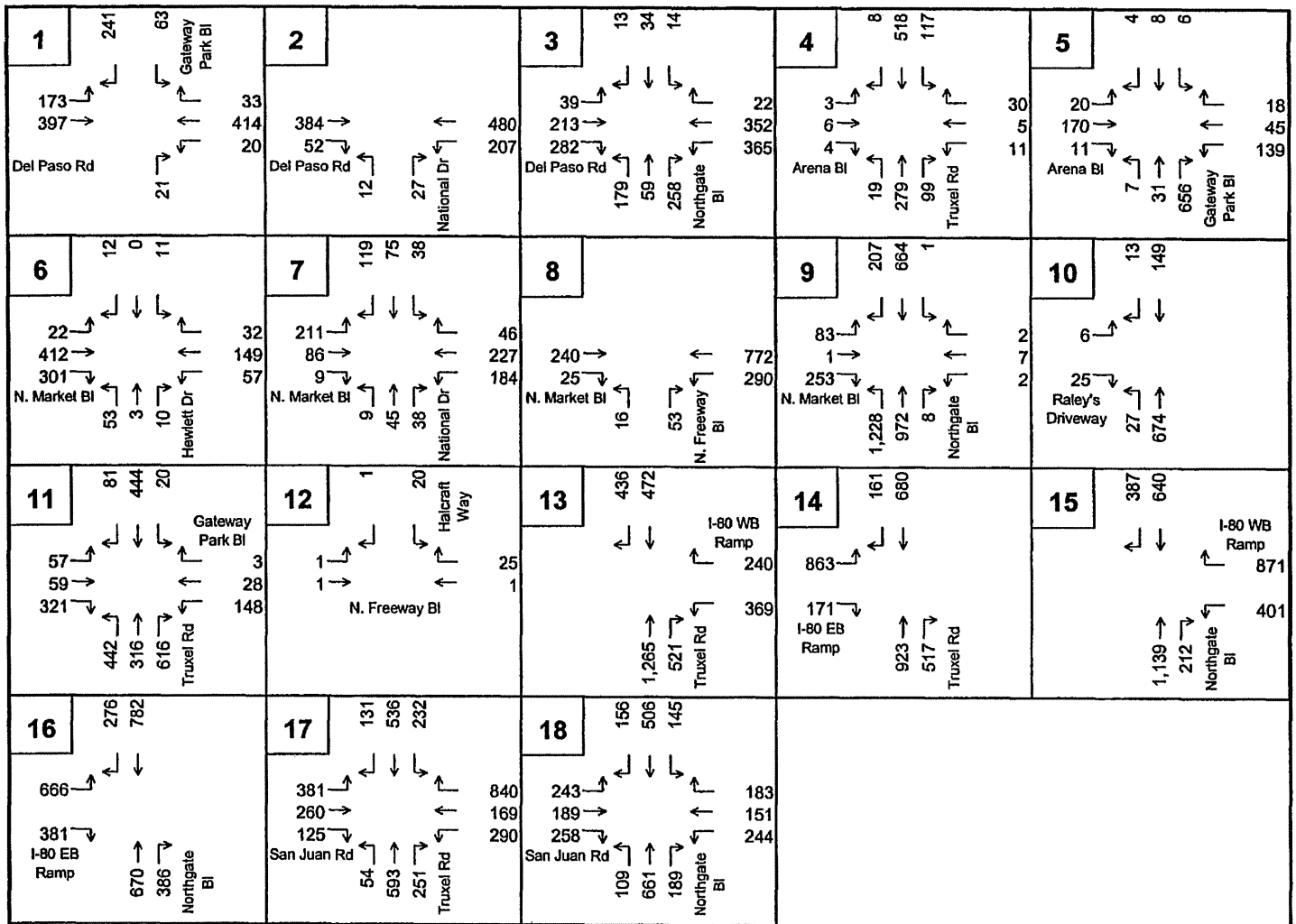
Gateway Park Boulevard extends from Truxel Road on the south Del Paso Road as a two to four lane arterial. Across Truxel Road, Gateway Park Boulevard becomes the entrance into the Natomas Marketplace. At its south end, Gateway Park Boulevard has been expanded to provide five lanes for the southbound approach to Truxel Road. Gateway Park Boulevard is currently being constructed to complete the missing section south of Del Paso Road. The intersection with Arena Boulevard will also be expanded and signalized prior to construction of the Proposed Project.

San Juan Road is a two to four lane roadway serving residential and commercial land uses south of I-80 from El Centro Road on the west to its eastern terminus at Norwood Avenue. Dual left turn lanes and separate right turn lanes are provided at the intersections with Truxel Road and Northgate Boulevard.

Existing Traffic Volumes

Turning traffic volumes were counted at the study intersections during the a.m. and p.m. commuter periods (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) and on Saturday between 1:00 a.m. and 3:00 p.m. during Spring 2001. The turning traffic volumes are shown in Figures 7.2-6 through 7.2-8. Estimated and actual average daily traffic volumes are shown in Figure 7.2-9.



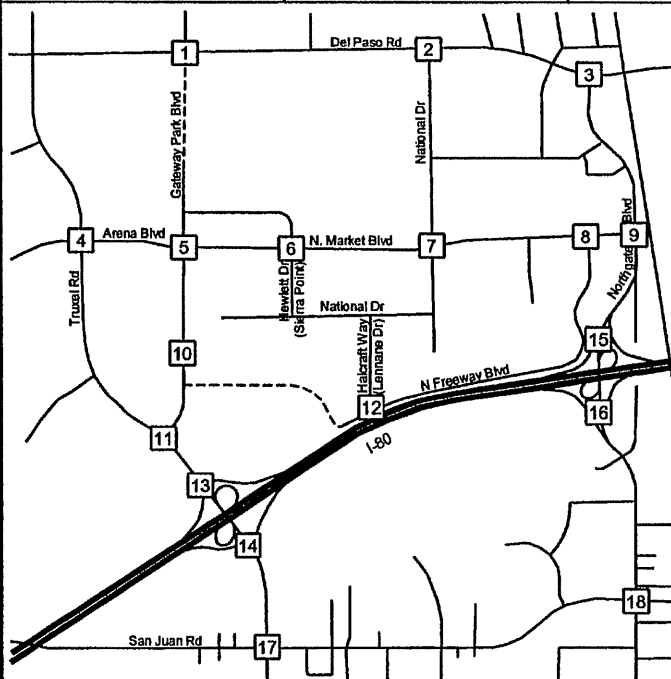
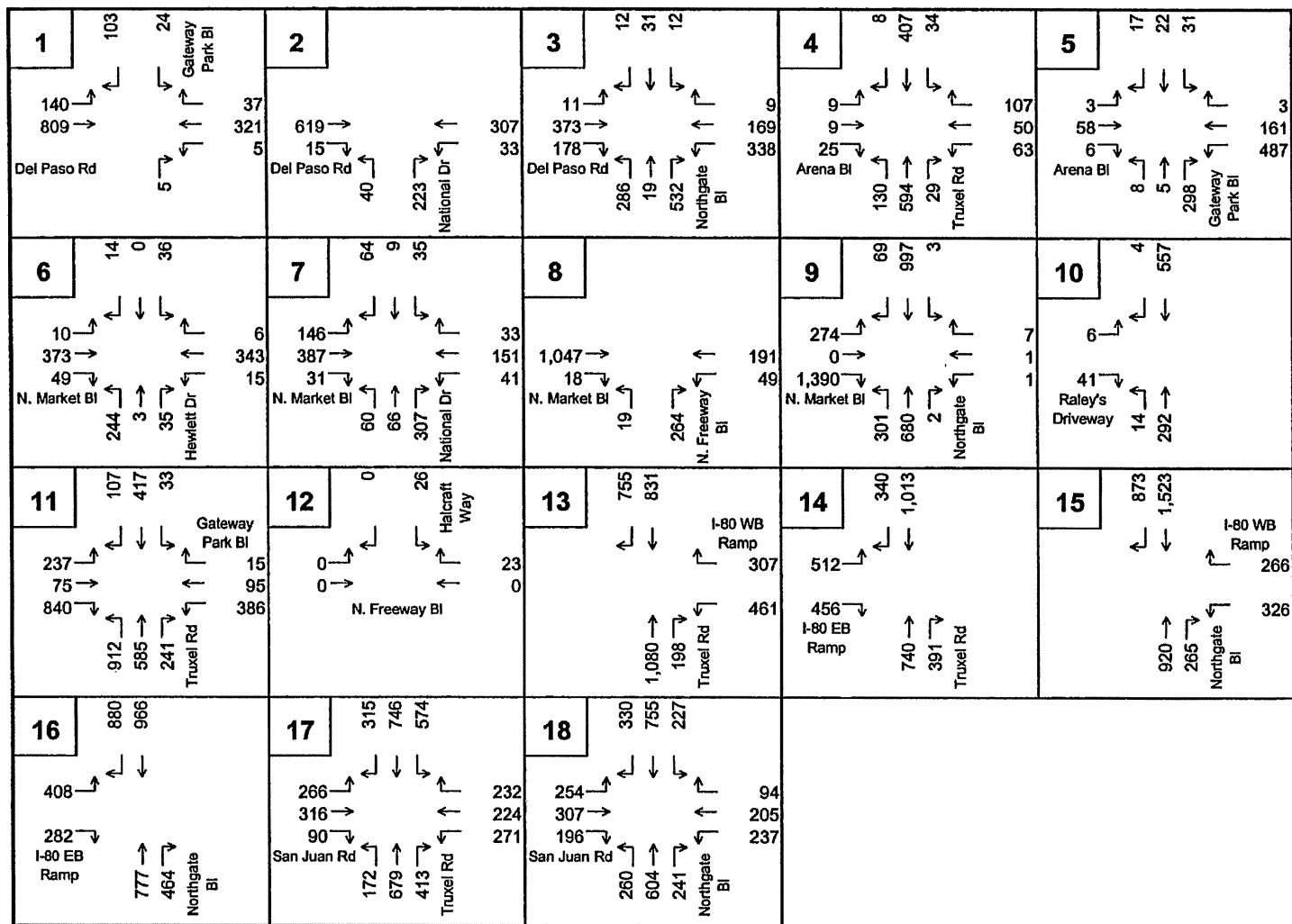


Dowling Associates
PROMENADE AT NATOMAS/
TRAFFIC IMPACT STUDY



Figure 7.2-6
EXISTING
AM PEAK HOUR TRAFFIC





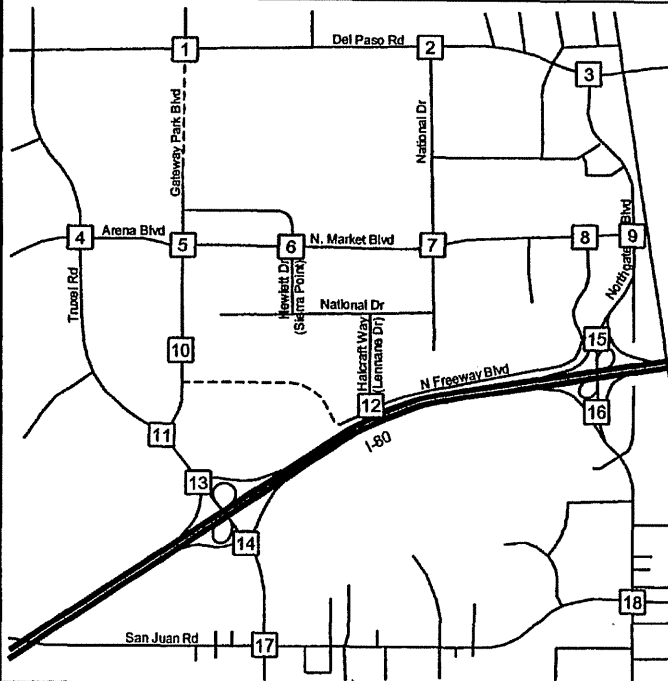
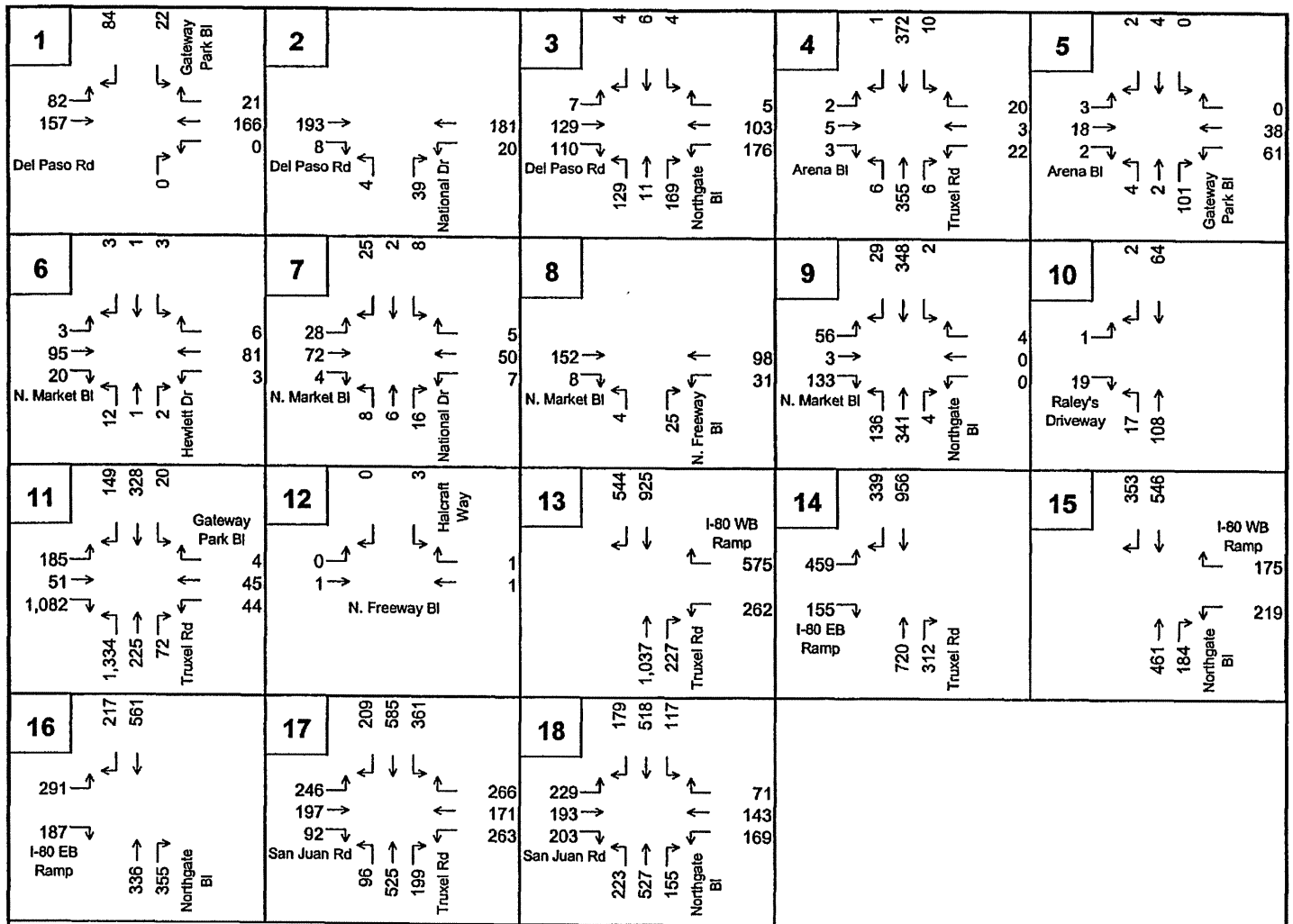
Dowling Associates

PROMENADE AT NATOMAS/
TRAFFIC IMPACT STUDY



Figure 7.2-7
EXISTING
PM PEAK HOUR TRAFFIC

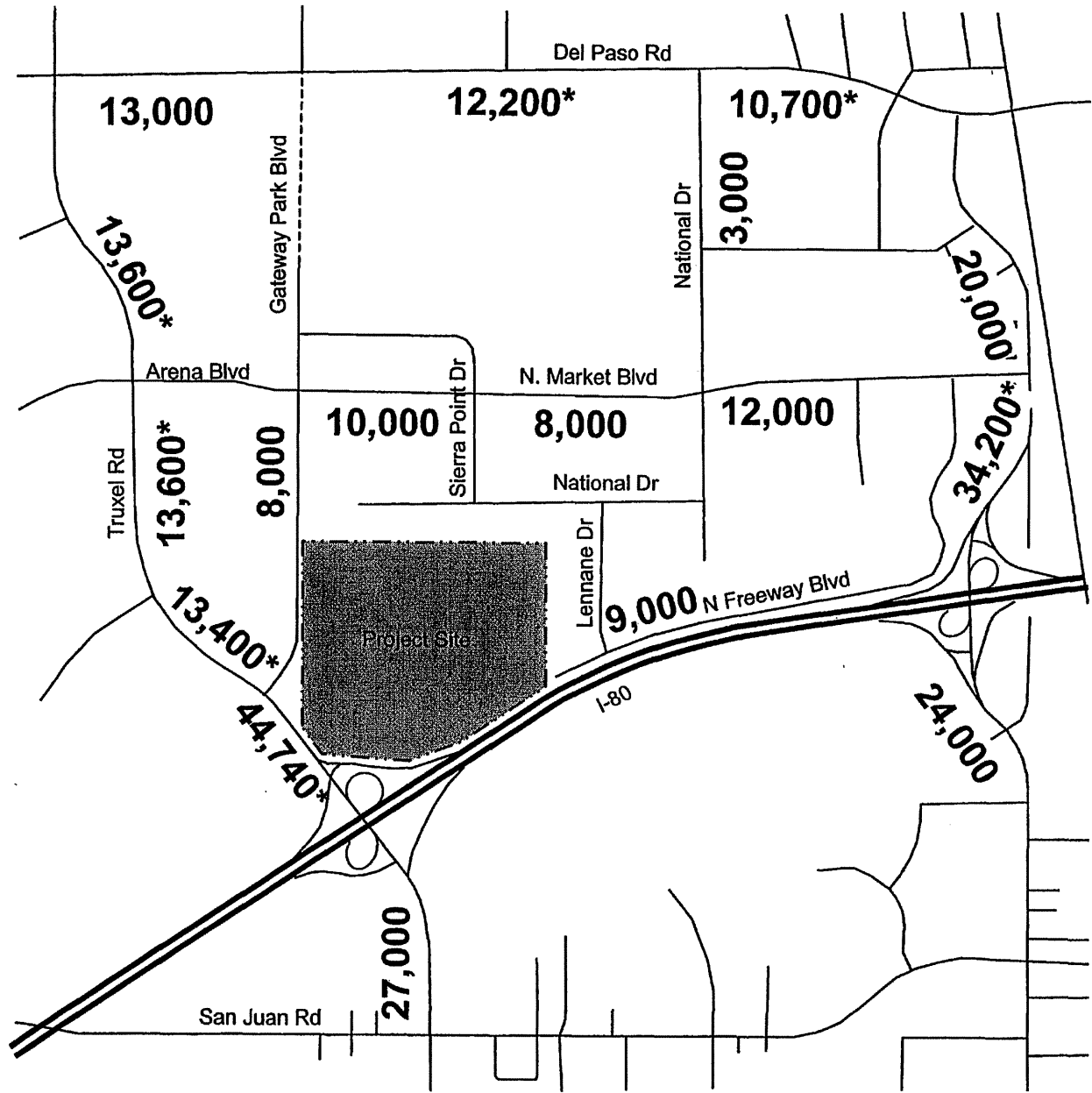




Dowling Associates
PROMENADE AT NATOMAS/
TRAFFIC IMPACT STUDY



Figure 7.2-8
EXISTING
SATURDAY PEAK HOUR TRAFFIC



* Data based on traffic counts conducted in March, 2002.

Dowling Associates
 PROMENADE AT NATOMAS/
 TRAFFIC IMPACT STUDY



Figure 7.2-9
Existing Average Daily Traffic
 (Estimated from Peak Hour Data)

Levels of Service

“Levels of service” describe the operating conditions experienced by motorists. Level of service 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. Levels of service are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that might occur. Level of Service (LOS) "A" through "E" generally represent traffic volumes at less than roadway capacity, while LOS "F" represents over capacity and/or forced flow conditions.

The City of Sacramento uses a LOS C goal for roadway operating conditions except at freeway ramp intersections within North Natomas, where the goal is LOS D. Because of the constraints of existing development in the City, and because of other environmental concerns, this goal cannot always be met. The County of Sacramento uses a LOS D goal for rural areas and LOS E for urban areas of the county. Caltrans considers freeway segments and ramp segments in the area to be acceptable if they operate at LOS E or better.

Signalized Intersections 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 7.2-1 shows level of service criteria for signalized intersections.

Unsignalized Intersections Analysis

Stop sign controlled intersections were analyzed using 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 control delay of all movements. Table 7.2-2 presents the relationship of total delay to level of service for stop sign controlled intersections.

Freeway Mainline Analysis

The freeway mainline was analyzed utilizing a methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 13 and 23). Maximum service flow rates of 2,200 vehicles per lane per hour for typical freeway lanes and 1,600 vehicles per lane per hour for auxiliary lanes were used, based upon data collected by Caltrans in the Sacramento urban area. Table 7.2-3 shows the relationship of freeway volume-to-capacity ratios and density to level of service. Currently, all study area freeway segments operate at LOS E or better.

TABLE 7.2-1

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.
B	> 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.
C	> 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.
E	> 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 7.2-2

LEVEL OF SERVICE CRITERIA
UNSIGNALIZED INTERSECTIONS

Level of Service	Average Control Delay (seconds/vehicle)
A	0 - 10
B	>10 - 15
C	>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.

TABLE 7.2-3

LEVEL OF SERVICE CRITERIA – FREEWAY MAINLINE

Level of Service	Maximum Volume-to-Capacity Ratio	Maximum Density (passenger vehicles per mile per lane)
A	0.32	11
B	0.53	18
C	0.74	26
D	0.90	35
E	1.00	45
F	Varies	Varies

SOURCE: Transportation Research Board, *Highway Capacity Manual*, Washington, D.C., 2000, pages 23-3 and 23-4.

Freeway Ramp and Merge / Diverge Analysis

Freeway ramps and merge/diverge areas were analyzed utilizing a methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 13 and 25). Freeway ramp operating conditions are dependent upon traffic volumes and the ramp characteristics. These characteristics include the length and type of acceleration / deceleration lanes; free-flow speed of the ramps; number of lanes; grade; and types of facilities that the ramps interconnect. Table 7.2-4 shows the relationship of level of service to freeway density.

TABLE 7.2-4

LEVEL OF SERVICE CRITERIA – FREEWAY RAMP MERGE / DIVERGE AREAS

Level of Service	Maximum Density (passenger vehicles per mile per lane)
A	10
B	20
C	28
D	35
E	> 35
F	Demand exceeds capacity

SOURCE: Transportation Research Board, *Highway Capacity Manual*, Washington, D.C., 2000, page 25-5.

Table 7.2-5 shows maximum service flow rates for freeway ramps, based upon information presented in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 13 and 25; 1985, Chapter 5). This methodology is utilized in cases where the freeway ramp configuration governs the operating condition. All study area ramps have enough storage capacity to accommodate existing peak hour queues and all ramps operated at LOS D or better.

TABLE 7.2-5

LEVEL OF SERVICE DEFINITIONS – FREEWAY RAMPS

Level of Service	Service Flow Rate for Single Lane Freeway Ramp					Definition
	< 20	20-40	40-50	50-55	> 55	
A	(1)	(1)	(1)	(1)	800/ 1,550	Conditions of free flow; speed is controlled by driver's desires, speed limits, or physical conditions.
B	(1)	(1)	(1)	1,150/ 2,250	1,150/ 2,350	Conditions of stable flow; operating speeds beginning to be restricted; little or no restrictions on maneuverability from other vehicles.
C	(1)	(1)	1,400/ 2,600	1,600/ 3,100	1,700/ 3,350	Conditions of stable flow; speeds and maneuverability more closely restricted
D	(1)	1,550/ 2,900	1,700/ 3,200	1,950/ 3,850	2,050/ 4,150	Conditions approach unstable flow; tolerable speeds can be maintained, but temporary restrictions may cause extensive delays; little freedom to maneuver; comfort and convenience low.
E	1,800/ 3,200	1,900/ 3,500	2,000/ 3,800	2,100/ 4,100	2,200/ 4,400	Conditions approach capacity; unstable flow with stoppages of momentary duration; maneuverability severely limited.
F	Widely Variable					Forced flow conditions; stoppages for long periods; low operating speeds.

(1) Level of service not attainable due to restricted design speed.

SOURCES: Transportation Research Board, Highway Capacity Manual, Washington, D.C., 2000, page 25-5.
 Transportation Research Board, Highway Capacity Manual, Washington, D.C., 1985, page 5-15.

Existing Levels of Service

Table 7.2-6 summarizes the existing a.m., p.m., and Saturday peak hour operating conditions at the study area intersections. Four intersections do not currently meet the City's level of service "C" goal. The Northgate Boulevard/Del Paso Road operates at LOS E during the p.m. peak hour, the N. Market Boulevard/National Drive intersection operates at LOS E during the a.m. peak hour and LOS D during the p.m. peak hour. Both intersections are controlled by stop signs. The Northgate Boulevard/I-80 West Ramps intersection operates at LOS E during the a.m. peak hour and the Truxel Road/San Juan Road intersection operates at LOS E during the a.m. peak hour and LOS D during the p.m. peak hour. Both of those intersections are controlled by traffic signals.

Table 7.2-7 shows the existing a.m., p.m., and Saturday peak hour operating conditions on the freeway mainline near the site. All of the freeway segments meet Caltrans' level of service "E" goal.

Table 7.2-8 summarizes the existing a.m., p.m., and Saturday peak hour operating conditions at the study area interchanges. All of the ramps operate at an acceptable level of service.

TABLE 7.2-6

EXISTING CONDITIONS – INTERSECTION LEVELS OF SERVICE

Intersection	Control	Peak Hour					
		AM		PM		Saturday	
		LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
Del Paso Rd. / Gateway Park Blvd.	Stop Sign	A	4.9	A	2.0	A	3.1
Del Paso Rd. / National Dr.	Stop Sign	A	2.1	A	3.7	A	1.2
Northgate Blvd. / Del Paso Rd.	4-Way Stop	C	22.8			B	10.4
Truxel Rd. / Arena Blvd.	Signal	B	18.7	C	26.8	B	13.1
Arena Blvd. / Gateway Park Blvd.	Stop Sign	C	15.2	B	13.1	A	6.2
N. Market Blvd. / Sierra Point Dr.	Stop Sign	A	2.2	A	9.5	A	1.1
N. Market Blvd. / National Dr.	Stop Sign					A	3.7
N. Market Blvd. / N. Freeway Blvd.	Stop Sign	A	2.6	A	5.2	A	1.6
N. Market Blvd. / Northgate Blvd.	Signal	C	25.3	C	26.0	B	19.1
Gateway Park Blvd. / Raley's Dr.	Stop Sign	A	0.6	A	0.8	A	1.4
Truxel Rd. / Gateway Park Blvd.	Signal	B	19.6	C	25.7	C	22.4
Lennane Dr. / N. Freeway	Uncontrolled	A	0.4	A	0.0	A	1.5
Truxel Rd. / I-80 West Ramps	Signal	B	10.6	B	12.3	B	10.8
Truxel Rd. / I-80 East Ramps	Signal	B	16.9	B	15.8	B	12.1
Northgate Blvd. / I-80 West Ramps	Signal	A	9.9	A	7.2	A	8.0
Northgate Blvd. / I-80 East Ramps	Signal	C	22.8	B	19.7	B	16.2
Truxel Rd. / San Juan Rd.	Signal					C	31.5
Northgate Blvd. / San Juan Rd.	Signal	C	30.0	C	31.8	C	29.3

Notes:

Shaded values indicate non-compliance with City standards.

¹ LOS = Level of Service² Weighted average control delay in seconds

SOURCE: Dowling Associates, Inc. 2002.

TABLE 7.2-7

EXISTING I-80 MAINLINE OPERATIONS

Location	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS ¹	V/C ²	Volume	LOS ¹	V/C ²	Volume	LOS ¹	V/C ²	Volume
Eastbound									
I-5 to Truxel Rd.	C	0.63	5,149	C	0.73	6,017	B	0.51	4,153
Truxel Rd. to Northgate Bl.	C	0.58	4,793	C	0.70	5,780	B	0.51	4,190
Northgate Bl. to Norwood Av.	C	0.67	4,408	E	0.97	6,434	C	0.65	4,284
Westbound									
Norwood Av. to Northgate Bl.	E	0.99	6,560	C	0.68	4,511	C	0.64	4,229
Northgate Bl. to Truxel Rd.	C	0.72	5,887	C	0.62	5,057	C	0.53	4,372
Truxel Rd. to I-5	C	0.64	6,235	C	0.53	5,242	B	0.44	4,306

Notes:

¹ LOS = Level of Service² V/C = Volume / Capacity

SOURCE: Dowling Associates, Inc., 2002.

TABLE 7.2-8

EXISTING I-80 INTERCHANGE OPERATIONS

Ramp	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS	Density	Volume	LOS	Density	Volume	LOS	Density	Volume
Eastbound I-80									
Truxel Rd. Off-Ramp	C	24.6	1,034	D	28.7	968	B	19.8	614
Truxel Rd. South On-Ramp	C	176	161	C	371	340	C	370	339
Truxel Rd. North On-Ramp	B	18.9	517	C	22.7	391	B	16.7	312
Northgate Blvd. Off-Ramp	C	22.9	1,047	C	27.6	690	B	20.0	478
Northgate Blvd. South On-Ramp	C	20.7	276	D	32.5	880	C	20.1	217
Northgate Blvd. North On-Ramp	C	23.0	386	D	33.7	464	C	22.3	355
Westbound I-80									
Northgate Blvd. Off-Ramp	D	32.8	1,272	C	23.1	592	C	21.4	394
Northgate Blvd. North On-Ramp	D	28.1	212	C	21.5	265	C	20.4	184
Northgate Blvd. South On-Ramp	C	422	387	C	952	873	C	385	353
Truxel Rd. Off-Ramp	D	28.1	609	C	24.1	768	C	20.9	837
Truxel Rd. North On-Ramp	C	568	521	C	216	198	C	248	227
Truxel Rd. South On-Ramp	C	476	436	C	824	755	C	593	544

NOTES:

¹ LOS = Level of Service² Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.

SOURCE: Dowling Associates, Inc. 2002.

Baseline Conditions (2001)

Existing traffic volumes were adjusted to include traffic from the Goldenland development (approved on June 13, 2000 but not constructed at the time the existing traffic data were collected in 2000). The Goldenland development site is located at the southwest corner of the Gateway Park/Del Paso Road intersection. Other approved projects near by the site are not likely to affect the results of the analysis. Other projects in North Natomas that require any type of discretionary approval would be subject to the environmental review process.

Lane configurations and traffic controls at the key study intersections may be modified before the completion of any development on the project site. As previously stated, the Gateway Park Boulevard and Arena Boulevard intersection will be expanded and a traffic signal will be installed. A summary of the lane configurations and traffic controls for baseline conditions is shown in Figure 7.2-3. The roadway system that would be in place for baseline conditions after project construction is shown in Figure 7.2-4.

The adjusted (baseline) traffic volumes that include the future traffic from the Goldenland development are shown in Appendix D, bound separately in Volume III of the Promenade at Natomas/Sacramento Auto Loop Project DEIR.

Bikeways

Bicycles are addressed in the 2010 Bikeway Master Plan (2010 Bikeway 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.

The 2010 Bikeway Plan contains proposed bicycle facilities adjacent to the Proposed Project site. On-street bike lanes are proposed along Truxel Road and Gateway Park Boulevard. In addition, the Bikeway Master Plan calls for a Class I bike trail connecting north and south Natomas once the pedestrian bridge is built over I-80.

Pedestrian Circulation

NNCP street sections near the Proposed Project include the requirement for pedestrian travel. Both sides of street sections along Gateway Park Boulevard and Truxel Road will require sidewalks. Portions of Truxel Road adjacent the Natomas Marketplace have existing sidewalks fronting along landscape treatments.

Transit

The Sacramento Regional Transit District (RT) provides service to the project site along Routes 13 (Northgate) and 14 (Norwood). Both routes provide service between the Arden/Del Paso Light Rail Station and the Arco Arena with a loop that passes west from North Market Boulevard, south on Gateway Park Boulevard, north on Truxel Road, and back east along North Market Boulevard. Service on both routes is provided on sixty-minute intervals from about 6:00 a.m. to 11:00 p.m. during weekdays and from about 8:00 a.m. to 7:00 p.m. on weekends and holidays. One additional bus is added during the weekday a.m. peak period, resulting in 30 minute headways during that period. Service for the two transit routes is staggered so the effective frequency at the project site is twice as often: 30 minute intervals normally, with 15 minute service during the a.m. peak hour.

No light rail transit (LRT) currently serves the project area; however, a light rail line is currently in the planning stages that would connect downtown, Natomas and the Sacramento International Airport. A transit stop is proposed near the intersection of Truxel Road and Gateway Boulevard. However, Regional Transit has not yet determined the exact location of the light rail line or the station.

REGULATORY 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 or County of Sacramento. All roadways studied in this analysis are City streets except for the following County roads:

- Del Paso Road from west of National Drive to east of Northgate Boulevard,
- North Market Boulevard from Gateway Park Boulevard to Northgate Boulevard,
- Northgate Boulevard north of I-80,
- National Drive,
- North Freeway Boulevard east of Lennane Drive,
- Lennane Drive, and
- Sierra Point Drive.

IMPACTS AND MITIGATION

Introduction to the Analysis

The analysis of traffic impacts was performed for baseline and cumulative conditions using methods required by the City of Sacramento. These methods are consistent with procedures recommended by the Institute of Transportation Engineers, an international organization of transportation professionals.

Method of Analysis

The methodology for determining project impacts was based on the analytical procedures identified in the previous section. The level of service analysis at intersections and on freeways was performed using the 2000 Highway Capacity Manual methodologies, as discussed previously in this section. In this discussion of the Methods of Analysis, trip generation, trip distribution and transit ridership are analytical tools used to describe the project's potential impacts. These analytical tools are described in detail below.

Trip Generation

To justify the use of the traffic analysis of PPB (contained in the Promenade at Natomas/Sacramento Auto Loop DEIR) for the Proposed Project, the number of vehicle trips generated by these two projects were compared. Table 7.2-9 shows the comparison of trips for these two projects. To ensure consistency, trip generation rates for the Proposed Project were prepared using the same methodology used to prepare the trip generation rates for PPB. The methodology is based upon information compiled by the Institute of Transportation Engineers (*Trip Generation, Sixth Edition, 1997*).

As seen in Table 7.2-9, the Proposed Project would generate 15 percent fewer trips than PPB during the a.m. peak hour, 6 percent fewer trips during the p.m. peak hour, and only 2% more trips during the Saturday peak hour. This difference in off-site traffic would not cause additional significant traffic impacts nor require additional mitigation beyond the measures proposed in the DEIR. Therefore, this analysis reiterates the analysis prepared for PPB included in the Promenade at Natomas/Sacramento Auto Loop DEIR (April 2003).

Adjustments to the number of trips generated at the project site were made to account for internal trips between different types of land uses within the project site using procedures recommended by

TABLE 7.2-9

**TRIP GENERATION COMPARISON:
PPB PER APRIL 2003 DEIR
AND
DECEMBER 2003 REVISED PROPOSED PROJECT**

Land Use	Amount	Number of Trips									
		AM Peak Hour (In - Out Total)			PM Peak Hour (In - Out Total)			Saturday Peak Hour (In - Out Total)			Weekly (In - Out Total)
PPB: Retail Project (Per April 2003 DEIR)											
Shopping Center	751.0 KSF ¹	406	259	665	1,372	1,486	2,858	2,391	2,207	4,598	30,291
Office	762.5 KSF	828	113	941	159	775	934	107	91	198	6,316
Total	1,513.5 KSF	1,234	372	1,606	1,531	2,261	3,792	2,498	2,298	4,796	36,607
Proposed Project: (Revised October 2003)											
Shopping Center	751.0 KSF	418	268	686	1,410	1,527	2,937	2,459	2,269	4,728	31,153
Office	504.0 KSF	596	81	677	109	535	644	76	65	141	4,596
Total	1,255.0 KSF	1,014	349	1,363	1,519	2,062	3,581	2,535	2,334	4,869	35,749
Difference in Trips (October 03 Revised Project- PPB)		-220	-23	-243	-12	-199	-211	+37	+36	+73	-858
Percentage Difference in Trips		-18%	-6%	-15%	-1%	-9%	-6%	+1%	+2%	+2%	-2%

NOTES: ¹ KSF = Thousand square feet

SOURCE: Dowling Associates, Inc. April 2003 DEIR

the Institute of Transportation Engineers for multi-use developments (*Trip Generation Handbook: An ITE Proposed Recommended Practice*, Washington, D.C., October, 1998, Chapter 7). Internal trips are trips that would occur between different land uses on the same site without accessing the external street system.

The project site was divided into two sub-sites split by North Freeway Boulevard. For the Proposed Project, the percent of internal trips would be 0.7 percent during the a.m. peak hour, 1.4 percent during the p.m. peak hour, 1.0 percent during the Saturday peak hour and for a typical weekday. The number of trips that would occur between the sub-sites described above were also estimated but were not removed from the trip generation estimates shown in Table 7.2-9. Before assigning trips to the roadway system in the model runs, the trip ends from the portion of the site north of North Freeway Boulevard were removed to prevent double-assignment.

Trip Distribution

The distribution of trips associated with the project site was derived from the SACMET 2025 travel model, observations of travel patterns near the site, and knowledge of the proposed access locations associated with the Proposed Project site. The model reflects the NNCP and approved land use changes in the North Natomas area as of the date of the Notice of Preparation (July 2000).

The distribution of trips for the Saturday peak hour was estimated by averaging the a.m. and p.m. peak hour trips assigned to the transportation network. From the selected zone assignment, the directional distribution of trips was estimated for 2025 conditions.

The SACMET 2025 travel demand model has the planned I-5/Arena Boulevard interchange in the transportation network. This interchange is currently under construction and on-line to be completed by November 2003 and the trip distribution for the analysis of Proposed Project under cumulative conditions reflects the presence of the interchange. A separate trip distribution pattern was developed for baseline conditions without the Arena Boulevard interchange.

The presence of the Arena Boulevard interchange (in combination with other differences described below) would reduce the percentage of project trips on Truxel Road north of Arena Boulevard by about one-third. The distribution of traffic to I-80 and points south of the Proposed Project site would be largely unaffected.

Two other differences between baseline and cumulative conditions affect trip distribution. For baseline conditions, National Drive would terminate on its north end at Del Paso Road. For future conditions, National Drive would extend further to the north. Development conditions would be different for baseline and cumulative conditions. Most notably, the difference in development at the Natomas Village Center site would affect trip distribution. For baseline conditions, no development was assumed at that site; for cumulative conditions, development was assumed at the site.

The distribution of project traffic for baseline and cumulative conditions are shown in Appendix D in Volume III of the Promenade at Natomas/Sacramento Auto Loop Project DEIR.

Transit Ridership

Transit ridership estimates for the Proposed Project were based upon information compiled by the Transportation Research Board (*NCHRP Report 187: Quick-Response Urban Travel Estimation Techniques and Transferable Parameters*, 1978). The transit ridership estimates developed from the NCHRP Report were compared to transit data collected specifically for Sacramento (*Pre-Census Travel Behavior Report: Analysis of the 2000 SACOG Household Travel Survey*, DKS Associates and Mark Bradley Research & Consulting, July 25, 2001).

Although the SACOG Household Travel Survey did not identify transit use for various types of development, it showed 2.9 percent of work trips and 0.6 percent of non-work trips were served by transit. The household survey transit ridership data indicates the NCHRP data tend to be conservative. The NCHRP data shows 5 percent of office, light industrial, and warehouse trips are served by transit and 3 percent of shopping patrons would use transit. The NCHRP data were considered appropriate for the analysis of transit impacts because their use resulted in more conservative estimates of transit ridership and because the data were available for different types of land uses – providing a reasonable tool for the comparison of the various development alternatives.

Table 7.2-10 shows the number of transit riders that would be generated with the Proposed Project.

Standards of Significance

The standards of significance in this analysis are based upon the current practice of the appropriate regulatory agencies. For most areas related to transportation and circulation, the standards of the City of Sacramento have been used. For traffic flow on the I-80 freeway system and associated interchanges, the standards of Caltrans have been used.

TABLE 7.2-10

TRANSIT RIDERSHIP PROPOSED PROJECT

Land Use	Amount	Auto Occupancy	Person Rate	Transit Riders						
				AM	PM	Su	Weekly	Monthly	Yearly	Weekly
Shopping Center	751.0 KSF ¹	1.64	3.0%	35	149	240	1,580	2,077	1,023	11,000
Office	504.0 KSF	1.35	5.0%	48	46	10	327	79	21	1,735
Total	1,255.0 KSF			83	195	250	1,907	2,156	1,044	12,735

NOTES:
¹ KSF = Thousand square feet.

SOURCE: NCHRP Report 187: *Quick-Response Urban Travel Estimation Techniques and Transferable Parameters*, Transportation Research Board, 1978.

Intersections

In the City of Sacramento, a significant traffic impact occurs at a signalized or unsignalized intersection (except for freeway ramp/arterial intersections within North Natomas) when:

- The traffic generated by the project degrades peak period level of service (LOS) from A, B, or C (without the project) to D, E, or F (with the project); or,
- The level of service (without project) is D, E, or F and project generated traffic increases the average vehicle delay by 5 seconds or more.

In the City of Sacramento at a freeway ramp/arterial intersection within North Natomas, a significant impact occurs at a signalized or unsignalized intersection when:

- The traffic generated by the project degrades peak period level of service from A, B, C or D (without the project) to E, or F (with the project); or,
- The level of service (without project) is E, or F and project generated traffic increases the average vehicle delay by 5 seconds or more.

The following freeway ramp/arterial intersections are within the NNCP area:

- Truxel Road / I-80 West Ramps
- Truxel Road / I-80 East Ramps
- Northgate Blvd. / I-80 West Ramps
- Northgate Blvd. / I-80 East Ramps

These standards have been developed consistent with a goal set forth in the City of Sacramento, General Plan Update (1988). Specifically, Section 5-11 - Goal D, states to "Work towards achieving a Level of Service C on the City's local and major street system." The NNCP (adopted by City Council Resolution No. 94-259 on May 3, 1994) established the following implementing policy for level of service: "Maintain LOS "D" at all freeway ramp/arterial street intersections. Maintain an overall LOS "C" on the remaining arterial and collector street system."

The County of Sacramento has adopted LOS "D" as the standard of significance for rural areas and LOS "E" for urban areas of the County. The following intersections are located in the county outside the Sacramento City limits:

- Del Paso Road / National Drive
- Northgate Blvd. / Del Paso Road
- Arena Blvd. / Gateway Park Boulevard
- N. Market Blvd. / Sierra Point Drive
- N. Market Blvd. / National Drive
- N. Market Blvd. / N. Freeway Boulevard
- N. Market Blvd. / Northgate Boulevard
- Northgate Blvd. / I-80 West Ramps
- Lennane Drive / N. Freeway Boulevard

All of the study intersections located outside the City Limits are within the NNCP area; therefore, the City's higher level of service standards established in the Community Plan were used as the standards of significance for intersections.

Freeway Ramps and Mainline

Caltrans considers the following to be significant impacts:

- Off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway.
- Project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service.
- Project traffic increases that cause the freeway level of service to deteriorate beyond level of service "E."

Bikeways

For the purposes of this EIR, impacts to bikeways are considered significant if the Proposed Project or its alternatives would:

- Hinder or eliminate an existing designated bikeway, or interfere with implementation of a proposed bikeway; or
- Result in unsafe conditions for bicyclists, including unsafe bicycle/pedestrian or bicycle/motor vehicle conflicts.

Pedestrian Circulation

For the purposes of this EIR, impacts to pedestrian circulation are considered significant if the Proposed Project or its alternatives would:

- Result in unsafe conditions or create a hindrance for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle access.

Transit System

For the purposes of this EIR, impacts to the transit system are considered significant if the Proposed Project or its alternatives would:

- Increase ridership, when added to the existing or future ridership, would exceed available or planned system capacity.¹

Parking

For the purposes of this EIR, impacts to parking are considered significant if the Proposed Project or its alternatives would:

- Result in parking demand that exceeds the available or planned parking supply.

Traffic Circulation and Safety

For the purposes of this EIR, impacts to traffic circulation and safety are considered significant if the Proposed Project or its alternatives would:

- Not comply with City design standards established for North Natomas or normal traffic engineering practices.

Impacts and Mitigation Measures

Baseline Conditions

An analysis of baseline plus project conditions was performed to determine the potential traffic impacts of the Proposed Project in combination with other projects that have already been approved. The only approved project in the vicinity of the Proposed Project is the Goldenland development (approved on June 13, 2000 but not constructed at the time the existing traffic data were collected). The Goldenland development site is located at the southwest corner of the Gateway Park/Del Paso Road intersection and is now completed. Traffic volumes from Goldenland development are nominal when compared with existing roadway capacity. A more significant aspect of that project is the connection of Gateway Park Boulevard from Del Paso Road to Arena Boulevard. As explained previously, this has been assumed in the analysis.

For the baseline conditions, full development of the Proposed Project (or one of the alternatives) is assumed to occur “instantaneously.” In this manner, the traffic and impacts associated with the project and other approved projects can be directly compared to known and measured conditions.

1 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.

The analysis of baseline conditions was performed using the TRAFFIX traffic impact analysis software package. Traffic volumes from the Proposed Project were added to the baseline traffic volumes based on the trip generation and distribution procedures described above. Project traffic was assigned to the transportation network based on the shortest path. The resulting traffic volumes were used to analyze intersection and freeway levels of service. Traffic volumes for baseline conditions are shown in Appendix D.

Impact

7.2-1 Intersections. (Project-specific)

The prior Retail Project development scenario (PPB) would provide no automall use and would provide approximately 740,000 sf of regional retail uses and 772,500 sf of office/retail uses. Intersection operating conditions associated with the baseline plus Proposed Project scenario are summarized in Table 7.2-11. Although the revised Proposed Project is smaller, the EIR analysis assumes the larger project would be developed. This development scenario would cause *significant impacts* at the following intersections:

- Northgate Boulevard/Del Paso Road – traffic associated with the Proposed Project would degrade the level of service at the intersection of Northgate Boulevard and Del Paso Road from LOS C to LOS D during the a.m. peak hour. The intersection would operate at LOS F during the p.m. peak hour, with an average delay increase of 15 seconds due to the project. This is considered a *significant impact*.
- Arena Boulevard (North Market Boulevard)/Gateway Park Boulevard - traffic associated with the Proposed Project would degrade the level of service at the intersection of Arena Boulevard from LOS C to LOS D during the p.m. peak hour. This is considered a *significant impact*.
- North Market Boulevard/North Freeway Boulevard - traffic associated with the Proposed Project would degrade the level of service at the intersection of N. Market Boulevard from North Freeway Boulevard from LOS B to LOS F during the p.m. peak hour. This is considered a *significant impact*.
- Truxel Road/Gateway Park Boulevard - traffic associated with the Proposed Project would degrade the level of service at the intersection from LOS B to LOS F during the a.m. peak hour, from LOS C to LOS D during the p.m. peak hour, and from LOS C to LOS D during the Saturday peak hour. This is considered a *significant impact*.
- Truxel Road/San Juan Road – traffic associated with the Proposed Project would degrade the level of service at the intersection from LOS E to LOS F. during the a.m. peak hour. During the p.m. peak hour, the intersection would operate at LOS D. This is considered a *significant impact*.

TABLE 7.2-11

PROPOSED PROJECT BASELINE LEVELS OF SERVICE

Intersection	Control	AM/PM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS ¹	Delay	LOS	Delay	LOS	Delay
Del Paso Rd. / Gateway Park Blvd.	Signal	C	26.5	C	27.0	C	26.6
Del Paso Rd. / National Dr.	Signal	B	13.2	B	18.1	B	10.4
Northgate Blvd. / Del Paso Rd.	4-Way Stop	D	na	D	na	B	11.8
Truxel Rd. / Arena Blvd.	Signal	C	25.0	C	32.0	C	30.4
Arena Blvd. / Gateway Park Blvd.	Signal	C	32.3	D	na	C	30.0
N. Market Blvd. / Sierra Point Dr.	Stop Sign	A	2.2	C	17.2	A	0.9
N. Market Blvd. / National Dr.	Signal	B	15.4	C	21.2	B	12.9
N. Market Blvd. / N. Freeway Blvd.	Stop Sign	A	5.6	D	na	A	5.6
N. Market Blvd. / Northgate Blvd.	Signal	C	34.6	C	30.2	C	23.3
Gateway Park Blvd. / Raley's Dr.	Stop Sign	A	0.5	A	0.6	A	0.3
Truxel Rd. / Gateway Park Blvd.	Signal	D	na	D	na	D	na
Lennane Dr. / N. Freeway	Stop Sign	A	0.6	A	0.6	A	0.1
Truxel Rd. / I-80 West Ramps	Signal	A	9.2	A	9.8	B	10.6
Truxel Rd. / I-80 East Ramps	Signal	B	19.7	B	16.9	B	17.0
Northgate Blvd. / I-80 West Ramps	Signal	A	9.3	A	7.2	A	7.4
Northgate Blvd. / I-80 East Ramps	Signal	B	19.9	B	15.3	B	12.6
Truxel Rd. / San Juan Rd.	Signal	E	na	D	na	D	na
Northgate Blvd. / San Juan Rd.	Signal	C	30.2	C	32.3	C	29.8
Gateway Park Blvd. / N. Freeway Blvd.	Signal	B	17.4	C	26.2	D	na

NOTES:
¹ LOS = Level of Service
² Weighted average control delay in seconds
 Shaded values indicate a potential significant impact.
 na = Not applicable (intersection does not exist)
 SOURCE: Dowling associates, Inc., 2002.

- North Market Boulevard/Northgate Boulevard– traffic at this intersection would not result in a significant impact. The impact would be considered *less than significant*.
- Gateway Park Boulevard/North Freeway Boulevard – this new intersection would operate at LOS E during the Saturday peak hour if constructed as shown in Figure 7.2-5. This is considered a *significant impact*.
- North Freeway Boulevard/West Project Access – This intersection will be designed to operate in accordance with City standards.

Mitigation

7.2-1 Intersections. (Project-specific)

Implementation of the following mitigation measures would reduce the magnitude of this impact for the Proposed Project to a *less-than-significant level*.

The mitigation measures are described below and are shown graphically in Appendix D (bound separately in Volume III of the Promenade at Natomas/Sacramento Auto Loop

Project DEIR). The effects of the mitigation measures on traffic operations are shown in tables also contained in Appendix D.

(a) Northgate Boulevard /Del Paso Road (#3)

This mitigation measure would improve the level of service from LOS D or worse to LOS C during peak conditions. The impact after mitigation would be *less than significant*.

A traffic signal shall be installed with protected left turn signal phasing for eastbound and westbound approaches and split signal phasing for the northbound and southbound approaches. An overlap traffic signal phasing shall be provided to allow northbound Northgate Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound Del Paso Road left turning movement, and prohibit U-turns for the westbound left turning movement.

(b) Arena Boulevard (North Market Boulevard)/Gateway Park Boulevard (#5)

This mitigation measure would improve the level of service from LOS D or worse to LOS C during peak conditions. The impact after mitigation would be *less than significant*.

Overlap traffic signal phasing shall be provided to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement.

(c) North Market Boulevard/North Freeway Boulevard (#8)

This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be *less than significant*.

A traffic signal with protected left turn signal phasing shall be installed for the westbound North Market Boulevard approach. Overlap traffic signal phasing shall be provided to allow northbound North Freeway Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement.

(d) Truxel Road/Gateway Park Boulevard (#11)

This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be *less than significant*.

The four-lane approach to the intersection from the Natomas Marketplace shall be converted to provide a left-turn lane, a combination left-through lane, and two right turn lanes. An overlap traffic signal phasing shall be provided to allow right turning traffic to proceed on a green arrow simultaneously with the northbound Truxel Road left turning movement, and prohibit U-turns for the northbound left turn movement; and

The five-lane approach to the intersection from Gateway Park Boulevard shall be converted to provide three left turn lanes, a through lane, and a right turn lane; and

An overlap traffic signal phasing shall be provided to allow northbound Truxel Road right turning traffic to proceed on a green arrow simultaneously with the southbound Gateway Park Boulevard left turning movement, and prohibit U-turns for the southbound left turn movement; and

Split phasing for the northbound Natomas Marketplace approach and the southbound Gateway Park Boulevard approach shall be provided.

(e) Truxel Road/San Juan Road (#17)

This mitigation measure would improve the level of service from LOS D or worse to LOS C during peak conditions. However, because it may not be feasible to add lanes at this location, the impact would be considered *significant and unavoidable*.

A right turn lane shall be added to the westbound San Juan Road approach to provide two left turn lanes, two through lanes and two right turn lanes and provide overlap traffic signal phasing to allow westbound San Juan Road right turning traffic to proceed on a green arrow simultaneously with the southbound Truxel Road left turning movement, and prohibit U-turns for the southbound left turning movement. However, it may not be feasible to add lanes in this location; and

An overlap traffic signal phasing shall be provided to allow northbound Truxel Road right turning traffic to proceed on a green arrow simultaneously with the westbound San Juan Road left turning movement, and prohibit U-turns for the westbound left turning movement.

(f) Gateway Park Boulevard/North Freeway Boulevard (#19)

This mitigation measure would improve the level of service from LOS E or worse to LOS C during Saturday peak conditions. The impact after mitigation would be *less than significant*.

A left turn lane shall be added to the southbound Gateway Park Boulevard approach to provide two left turn lanes and two through lanes; and

An overlap traffic signal phasing shall be provided to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Freeway Boulevard left turning movement, and prohibit U-turns for the westbound left turn movement.

Impact

7.2-2 Freeways. (Project-specific)

The following discussion of freeway operations addresses only the impacts identified as significant according to the significance criteria identified earlier in this section. Other portions of the freeway would fail to satisfy Caltrans standards with or without the project and would not be identified as significant impacts.

Development of the Proposed Project would increase traffic volumes on the freeway system. I-80 mainline operating conditions associated with the baseline plus project scenario are included in Tables 7.2-12 and 7.2-13.

TABLE 7.2-12

PROPOSED PROJECT BASELINE I-80 MAINLINE OPERATIONS

Location	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS	V/C	Vol	LOS	V/C	Vol	LOS	V/C	Vol
Eastbound									
I-5 to Truxel Rd.	C	0.70	5,744	D	0.79	6,474	C	0.59	4,815
Truxel Rd. to Northgate Blvd.	C	0.59	4,831	C	0.73	5,959	C	0.54	4,427
Northgate Blvd. To Norwood Ave.	C	0.69	4,525				C	0.71	4,701
Westbound									
Norwood Ave. to Northgate Blvd.	F	1.06	7,025	C	0.73	4,809	C	0.71	4,687
Northgate Blvd. To Truxel Rd.	C	0.73	5,974	C	0.63	5,201	C	0.56	4,630
Truxel Rd. to I-5	C	0.65	6,395	C	0.62	6,065	B	0.50	4,911

NOTES:
 1 LOS = Level of Service
 2 V/C = Volume / Capacity
 3 Vol = Traffic Volume
 Shaded values indicate a potential significant impact.
 SOURCE: Dowling Associates, Inc., 2002.

TABLE 7.2-13

PROPOSED PROJECT BASELINE I-80 INTERCHANGE OPERATIONS

Ramp	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS	d(t)	Vol	LOS	d(t)	Vol	LOS	d(t)	Vol
Eastbound I-80									
Truxel Rd. Off-Ramp	B	17.1	1629	B	19.2	1425	B	14.3	1276
Truxel Rd. South On-Ramp	C	217	199	C	566	519	C	628	576
Truxel Rd. North On-Ramp	B	19.0	517	C	23.3	391	B	17.6	312
Northgate Blvd. Off-Ramp	B	14.4	1047	B	17.7	690	B	13.2	478
Northgate Blvd. South On-Ramp	C	21.5	355	F	36.6	1281	C	22.7	397
Northgate Blvd. North On-Ramp	C	23.6	386	F	36.7	464	C	24.4	355
Westbound I-80									
Northgate Blvd. Off-Ramp	F	35.2	1650	C	24.8	746	C	24.0	594
Northgate Blvd. North On-Ramp	D	28.6	212	C	22.3	265	C	21.8	184
Northgate Blvd. South On-Ramp	C	422	387	C	952	873	C	385	353
Truxel Rd. Off-Ramp	B	17.8	696	B	15.5	912	B	13.8	1095
Truxel Rd. North On-Ramp	C	568	521	C	216	198	C	248	227
Truxel Rd. South On-Ramp	C	650	596	B	1721	1528	C	1253	1149

NOTES:
 1 LOS = Level of Service
 2 Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.
 3 Vol = Traffic Volume
 Shaded values indicate a potential significant impact.
 SOURCE: Dowling Associates, Inc., 2002.

Westbound I-80 would operate at LOS F west of Northgate Boulevard during the a.m. peak hour with or without the Proposed Project and for all the project alternatives. Likewise, the I-80 westbound Northgate Boulevard off-ramps would operate at LOS F during the a.m. peak hour. None of these freeway operational problems would be significant impacts of the project because the condition would exist without the project.

In addition, during the p.m. peak hour, both the northbound and southbound Northgate Boulevard ramps onto eastbound I-80 would operate at LOS F, but the downstream freeway would also operate at LOS F, so there would be no significant impacts at the ramps. A significant impact at a freeway ramp would occur if project traffic would cause the ramp's merge/diverge level of service to be worse than the freeway's level of service.

Freeway off-ramp queues would be contained without extending into the ramp's deceleration area or onto the freeway for the Proposed Project and all alternatives. Expected queues are shown in the traffic study supplemental document that contains the level of service calculations.

The following discussion addresses significant impacts of the Proposed.

The Proposed Project development scenario would cause significant impacts at freeway locations. The project would cause the southbound Truxel Road merge onto westbound I-80 to operate at LOS E during the p.m. peak hour when the freeway would operate at LOS C. This is considered a *significant impact*.

Mitigation

7.2-2 Freeways. (Project-specific)

For eastbound I-80, east of Northgate Boulevard, it might be possible to mitigate impacts for this section of I-80 for the project; however, there are several constraints that make mitigation infeasible. The potential mitigation would require adding an auxiliary lane on eastbound I-80 from Northgate Boulevard to Norwood Avenue. The freeway widening would begin at the Northgate Boulevard on-ramp by providing the new auxiliary lane for ramp traffic to enter without having to merge onto the three lane section of I-80. The auxiliary lane would continue through the northbound Northgate Boulevard merge area with northbound Northgate Boulevard traffic merging into the new auxiliary lane.

These changes would improve p.m. peak hour freeway and ramp operations to LOS C, but would require widening the bridge across the Natomas East Main Drainage Canal and the Union Pacific Railroad tracks. Widening the freeway east of the bridge may require additional right-of-way or expensive construction methods to avoid right-of-way acquisition. The potential mitigation measure is considered infeasible; therefore, this impact would remain *significant and unavoidable*.

For westbound I-80 at the Southbound Truxel Road On-Ramp, no feasible mitigation measures were identified for this interchange ramp; therefore, the impact would remain *significant and unavoidable*.

*Impact***7.2-3 Bikeways. (Project-specific)**

Development of the project would result in the addition of employees, visitors, and shopping patrons to the project site, some who would travel by bicycle. A Class I bike trail is shown on the Sacramento Bikeway Master Plan that would pass through the Proposed Project site. The Proposed Project would interfere with implementation of the bikeway system proposed for North Natomas. This would be a *significant impact*.

*Mitigation***7.2-3 Bikeways. (Project-specific)**

This mitigation measure would ensure the impact is *less than significant*.

A Class I bike trail or Class II bike lane shall be provided through the Proposed Project site in accordance with the Sacramento Bikeway Master Plan.

*Impact***7.2-4 Pedestrian Circulation. (Project-specific)**

Development of the project would result in the addition of employees, visitors, and shopping patrons to the project site. Sidewalks would be required along all new roadway construction in the project vicinity in conformance with City design standards. Although they are not shown on the preliminary site plans for the Proposed Project, it is anticipated that direct pedestrian corridors will be provided between project activity centers and the proposed future LRT transit stop along Truxel Road.

The project is not anticipated to result in unsafe conditions for pedestrians, including unsafe bicycle/pedestrian or pedestrian/motor vehicle conflicts. Therefore, with regard to pedestrian circulation, there would be a *less-than-significant impact*.

*Mitigation***7.2-4 Pedestrian Circulation. (Project-specific)**

No mitigation would be required.

*Impact***7.2-5 Parking. (Project-specific)**

Development of the Proposed Project would increase the demand for parking. The parking demand and proposed parking supply for the Proposed Project are shown in Table 7.2-14. The Proposed Project would provide enough parking on site in accordance with City Code

TABLE 7.2-14

PARKING GENERATION

Land Use	Amount	Parking Demand		Parking Supply	Surplus Spaces
		Weekday	Saturday		
Shopping Center	751.0 KSF ¹	2,279	2,531	4,003	
Office	504.0 KSF	1,141	190 ²	1,593	
Total	1,255.0 KSF	3,420	2,721	5,596	2,176

NOTES:

1 KSF = Thousand square feet

2 Saturday parking demand for office was based on the relationship between Saturday and Weekday parking demand factors described in *Shared Parking*, Exhibit 26, Urban Land Institute, 1982.

SOURCES:

Parking Generation, Institute of Transportation Engineers, 1987. *Shared Parking*, Urban Land Institute, 1982. Promenade at Natomas site map, 10/15/03 Dowling Associates, Inc., 2002.

to accommodate the typical parking demand. Since the Proposed Project must comply with City Code, *no impact* is identified.

*Mitigation***7.2-5 Parking. (Project-specific)**

No mitigation would be required.

*Impact***7.2-6 Transit Ridership. (Project-specific)**

Regional Transit Routes 13 and 14 currently serve the project site with a total of four buses during the a.m. peak hour and two during the p.m. peak hour. The buses on these routes have a capacity of 40 passengers per vehicle for a total capacity of 160 passengers during the a.m. peak hour and 80 passengers during the p.m. peak hour.

The peak direction of patronage along these routes during the weekday commute is toward the Arden/Del Paso Light Rail Station (toward downtown Sacramento) during the a.m. peak hour and away from downtown during the p.m. peak hour. The demand for transit service to the project site would be in the reverse direction of the peak commuter demand.

The prior retail project was projected to generate 83 transit riders during the a.m. peak, and 195 during the p.m. peak hour. The p.m. peak hour demand for transit services would exceed the capacity of the transit system. Therefore, this would be a *significant impact*.

The total ridership (on a weekly basis) for the Proposed Project would be approximately three times the ridership for the current zoning. The Proposed Project would generate about 27 fewer riders than the current zoning during the a.m. peak hour, but would increase ridership during the p.m. peak hour by 36 riders. Saturday ridership would increase by 225 transit riders.

*Mitigation***7.2-6 Transit Ridership. (Project-specific)**

This mitigation measure would mitigate transit ridership impacts to a *less-than-significant* level.

Funding shall be provided to RT to expand bus transit service sufficient to accommodate the traffic demand at the site.

*Impact***7.2-7 Traffic Circulation and Safety. (Project-specific)**

Several roadway design aspects were evaluated with regard to traffic circulation and safety. The number of lanes, access control, and centerline radius required on the primary roadways serving the site were evaluated according to the City of Sacramento Street Design Guidelines (Revised December 2001) (see Appendix D). A summary of the standard number of lanes for roadways affected by the Proposed Project is provided in Table 7.2-15.

TABLE 7.2-15	
LANE REQUIREMENTS ON AFFECTED ROADWAYS	
Section	Proposed Project
Gateway Park Boulevard:	
North Freeway Boulevard to North Market Boulevard	
Weekday Traffic Volume	19,925
Number of Through Lanes	4
Truxel Road to North Freeway Boulevard	
Weekday Traffic Volume	34,850
Number of Through Lanes	6
North Freeway Boulevard:	
Gateway Park Boulevard to Main Project Driveway	
Weekday Traffic Volume	26,345
Number of Through Lanes	6
East of Main Project Driveway	
Weekday Traffic Volume	13,930
Number of Through Lanes	2
SOURCES: City of Sacramento Street Design Guidelines, Revised December 2001. Dowling Associates, Inc., 2002.	

Based on the daily traffic volumes, the Sacramento Street Design Guidelines identify a need for six through lanes on Gateway Park Boulevard from Truxel Road to North Freeway Boulevard and on North Freeway Boulevard from Gateway Park Boulevard to the Main Project driveway. The site plans show four lane roadways in these sections.

No driveway access would be allowed along Truxel Road (an eight-lane roadway), nor would driveway access be allowed along Gateway Park Boulevard between Truxel Road and North

Freeway Boulevard, a distance of approximately 850 feet, due to the requirement for 500-foot driveway spacing on six-lane roadways. These access restrictions are necessary to prevent potentially hazardous weaving movements across multiple lanes of heavily traveled streets.

The centerline radius on Gateway Park Boulevard between Truxel Road and North Freeway Boulevard is approximately 1000 feet. The standard radius for this section of six-lane roadway is 1500 feet (based on the Sacramento Street Design Guidelines).

The internal roadway configuration has changed under the Proposed Project; however, the internal roadways will be designed to City standards. This would ensure impacts associated with internal roadways and driveway placement would be less than significant.

The design elements discussed above could result in substandard levels of safety and would constitute a *significant impact*.

Mitigation

7.2-7 Traffic Circulation and Safety. (Project-specific)

(a) Required number of lanes

The mitigation measures described below regarding the number of lanes would mitigate the impact regarding the number of lanes to *less-than-significant levels*.

Six through lanes shall be provided on Gateway Park Boulevard from Truxel Road to North Freeway Boulevard or Main Project driveway. Driveways shall be prohibited on Truxel Road and Gateway Park Boulevard from Truxel Road to North Freeway Boulevard.

(b) Centerline radii

A roadway design that satisfies the Caltrans standard for comfortable speed on horizontal curves and is acceptable to the City of Sacramento Public Works Department would mitigate this impact to *less than significant levels*.

A design that satisfies Caltrans requirements for horizontal curves described in the Highway Design Manual (Figure 203.2) for the six-lane section of Gateway Park Boulevard shall be provided. A combination of centerline radius modifications (standard is 1,500 feet), superelevation (0.06 maximum is standard per Caltrans Design Manual Table 202.2), and/or speed limit restrictions (55 mph is City standard for six-lane streets in North Natomas serving up to 36,000 vehicles daily). A roadway with 1,000-foot centerline radius and 0.08 superelevation would provide a 55 mph design speed. A 0.04 superelevation could be provided if the design speed were reduced to 50 mph and a 1,000-foot radius were used.

1	Del Paso Rd East of Truxel Rd
PPB	36,000
AA	36,000
AB	36,000
AC	38,000

2	Del Paso Rd West of National Dr
PPB	38,000
AA	37,000
AB	37,000
AC	40,000

3	N. Market Blvd East of Gateway Park
PPB	28,000
AA	28,000
AB	28,000
AC	30,000

4	N. Market Blvd West of National Dr
PPB	22,000
AA	21,000
AB	21,000
AC	23,000

5	N. Market Blvd East of National Dr
PPB	27,000
AA	27,000
AB	27,000
AC	28,000

6	N. Freeway Blvd East of Gateway Park
PPB	26,000
AA	1,200
AB	19,000
AC	25,000

7	N. Freeway Blvd East of Main Driveway
PPB	14,000
AA	7,000
AB	10,000
AC	12,000

8	N. Freeway Blvd East of Lennane Dr
PPB	22,000
AA	20,000
AB	21,000
AC	23,000

9	Truxel Rd North of Arena Blvd
PPB	49,000
AA	44,000
AB	47,000
AC	51,000

10	Truxel Rd South of Arena Blvd
PPB	64,000
AA	63,000
AB	63,000
AC	67,000

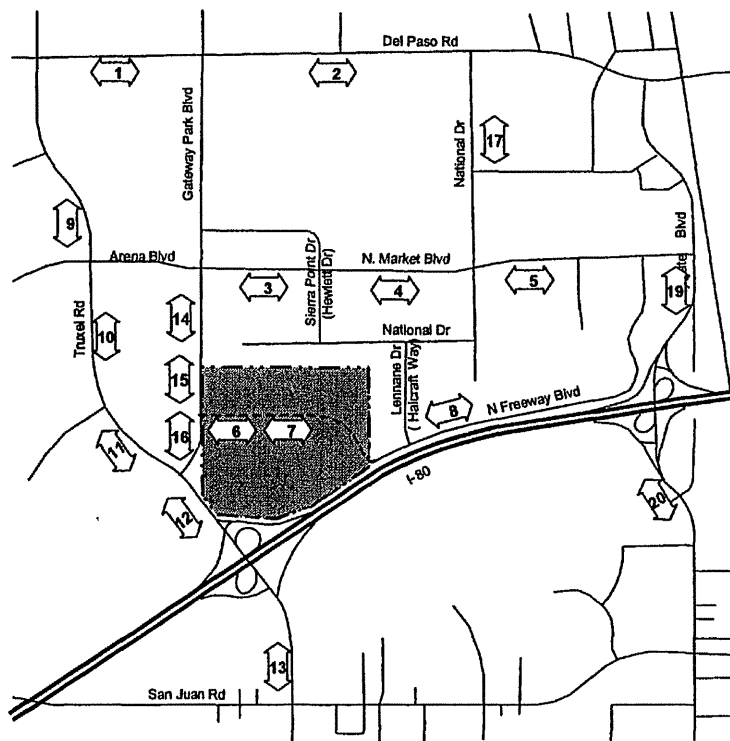
11	Truxel Rd North of Gateway Park
PPB	71,000
AA	69,000
AB	70,000
AC	75,000

12	Truxel Rd South of Gateway Park
PPB	107,000
AA	89,000
AB	102,000
AC	111,000

13	Truxel Rd North of San Juan Rd
PPB	39,000
AA	34,000
AB	36,000
AC	40,000

14	Gateway Park Blvd South of Arena Blvd
PPB	23,000
AA	14,000
AB	19,000
AC	23,000

15	Truxel Rd North of N. Freeway Blvd
PPB	20,000
AA	11,000
AB	15,000
AC	20,000



16	Gateway Park Blvd South of N. Freeway Blvd
PPB	35,000
AA	15,000
AB	29,000
AC	35,000

17	National Dr North of N. Market Blvd
PPB	16,000
AA	14,000
AB	15,000
AC	17,000

18	Northgate Blvd North of N. Market Blvd
PPB	37,000
AA	36,000
AB	36,000
AC	39,000

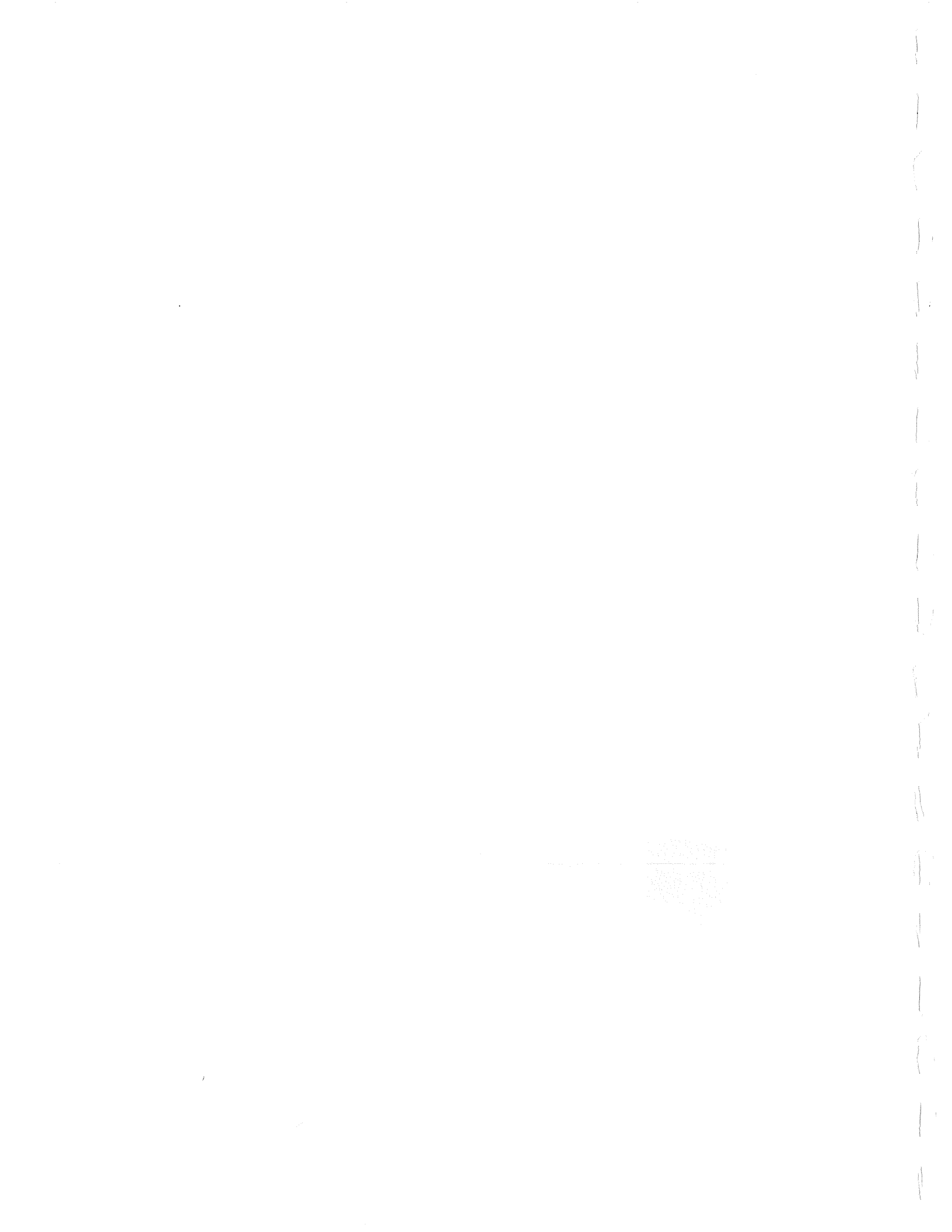
19	Northgate Blvd South of N. Market Blvd
PPB	64,000
AA	60,000
AB	61,000
AC	66,000

20	Northgate Blvd South of I-80 Ramps
PPB	49,000
AA	49,000
AB	49,000
AC	52,000

Dowling Associates
**PROMENADE AT NATOMAS/
 TRAFFIC IMPACT STUDY**



Figure 7.2-11
DAILY TRAFFIC VOLUMES
2025



Traffic forecasts for the 2025 a.m. and p.m. peak hours were produced by the SACMET model to serve as the basis for the cumulative traffic analysis. Cumulative Saturday peak hour traffic volumes were developed by applying factors to the cumulative a.m. and p.m. peak hour turning volumes based on the relationship between a.m. and p.m. intersection approach volumes and Saturday approach volumes for existing conditions. Traffic volumes for cumulative peak Saturday conditions were developed based on the relationship between existing weekday and Saturday traffic volumes. Traffic volumes for cumulative Proposed Project conditions were developed by adding project traffic to the cumulative no project scenario.

The daily traffic volumes for the project are shown in Figure 7.2-11. Peak hour turning movement traffic volumes for the Proposed Project are shown in Appendix D.

The cumulative analysis addresses impacts that differ from the project impacts for baseline conditions with regard to intersection operations, freeway operations, transit service, and parking. The analysis of intersection impacts was based on the methods described for the analysis of existing conditions. Although the cumulative condition would include extension of LRT along Truxel Road from downtown Sacramento to the Sacramento International Airport, it has not been determined on which side of Truxel Road the LRT would be constructed. The exact effects of LRT on traffic operations, under the conditions assumed in this study, are not known at this time. Any future expansion of light rail would require a separate analysis. For this study, it is assumed that the LRT would be located along the west side of Truxel Road. This assumption is supported by the existence of right-of-way for the line and station, as well as 300 park and ride spaces in this location.

Impact

7.2-8 Intersections. (Cumulative)

The Proposed Project would increase traffic volumes at study area intersections. Intersection operating conditions associated with the cumulative scenario are summarized in Table 7.2-16. ***Significant impacts*** would occur at the following intersections:

- Del Paso Road/National Drive – the intersection would operate at LOS E during the p.m. peak hour without the Proposed Project, and the Proposed Project would increase the average delay by 15 seconds. This is considered a ***significant impact***.
- Northgate Boulevard/Del Paso Road – the intersection would operate at LOS F during the a.m., p.m., and Saturday peak hour under existing conditions. Without the Proposed Project the Del Paso Road/National Drive intersection would operate at LOS E during the p.m. peak hour. Under the project the average delay would increase by 15 seconds. This is considered a ***significant impact***.

Increase the average delay at the intersection by 18 seconds during the a.m. and p.m. peak hours, by 8 seconds during Saturday peak hour. This is considered a ***significant impact***.

TABLE 7.2-17

CUMULATIVE LEVELS OF SERVICE
PROPOSED PROJECT WITH AND WITHOUT NATIONAL DRIVE EXTENSION

Intersection	Control	AM Peak Hour						PM Peak Hour						Saturday Peak Hour					
		Without Extension		With Extension		Without Extension		With Extension		Without Extension		With Extension		Without Extension		With Extension			
		LOS	Delay ²	LOS	Delay ²	LOS	Delay ²	LOS	Delay ²	LOS	Delay ²	LOS	Delay ²	LOS	Delay ²	LOS	Delay ²		
Del Paso Rd. / Gateway Park Blvd.	Signal	D	39.1	D	39.1	C	24.6	C	24.6	B	19.9	B	19.9	B	19.9	B	19.9		
Del Paso Rd. / National Dr.	Signal	D	45.4	D	45.5	F	97.8	F	98.9	C	22.9	C	23.1	C	23.1	C	23.1		
Northgate Blvd. / Del Paso Rd.	4-Way Stop	F	504.3	F	504.0	F	847.9	F	852.8	F	177.7	F	177.7	F	177.7	F	177.7		
Truxel Rd. / Arena Blvd.	Signal	F	207.4	F	207.4	F	230.8	F	230.7	D	38.5	D	38.5	D	38.5	D	38.5		
Arena Blvd. / Gateway Park Blvd.	Signal	E	56.1	E	56.1	D	47.8	D	47.8	D	39.4	D	39.4	D	39.4	D	39.4		
N. Market Blvd. / Sierra Point Dr.	Stop Sign	C	22.0	C	24.9	F	101.6	F	112.2	D	34.9	D	34.9	E	37.8	E	37.8		
N. Market Blvd. / National Dr.	Signal	F	145.9	F	242.6	F	343.8	F	429.7	B	19.5	B	19.5	B	19.6	B	19.6		
N. Market Blvd. / N. Freeway Blvd.	Stop Sign	A	2.8	A	1.0	F	166.5	C	20.5	A	3.0	A	2.7	A	2.7	A	2.7		
N. Market Blvd. / Northgate Blvd.	Signal	F	166.7	F	167.0	F	98.7	F	96.5	B	20.0	B	19.9	B	19.9	B	19.9		
Gateway Park Blvd. / Raley's Dr.	Stop Sign	A	0.3	A	0.3	A	0.4	A	0.4	A	0.1	A	0.1	A	0.1	A	0.1		
Truxel Rd. / Gateway Park Blvd.	Signal	F	81.6	F	81.6	F	201.9	F	201.9	F	196.9	F	196.9	F	196.9	F	196.9		
Lennane Dr. / N. Freeway	Stop Sign	A	4.4	A	4.9	A	4.8	A	3.8	A	3.9	A	3.8	A	3.8	A	3.8		
Truxel Rd. / I-80 West Ramps	Signal	D	42.8	D	42.8	D	38.7	D	38.7	F	11.3	F	11.3	F	11.3	F	11.3		
Truxel Rd. / I-80 East Ramps	Signal	C	27.7	C	27.7	F	82.1	F	82.1	C	32.5	C	32.5	C	32.5	C	32.5		
Northgate Blvd. / I-80 West Ramps	Signal	B	17.5	B	17.5	C	32.0	C	32.0	A	8.3	A	8.3	A	8.3	A	8.3		
Northgate Blvd. / I-80 East Ramps	Signal	F	92.2	F	92.2	F	193.6	F	193.6	B	18.0	B	18.0	B	18.0	B	18.0		
Truxel Rd. / San Juan Rd.	Signal	F	134.5	F	134.3	E	63.4	E	63.4	E	58.0	E	58.0	E	58.0	E	58.0		
Northgate Blvd. / San Juan Rd.	Signal	D	47.0	D	47.0	F	83.8	F	83.8	C	32.4	C	32.4	C	32.4	C	32.4		
Gateway Park Blvd. / N. Freeway Blvd.	Signal	C	28.2	C	22.1	D	49.7	D	47.8	D	30.6	D	30.6	F	101.5	F	101.5		
N. Freeway Blvd. / West Access	Signal	C	23.1	C	23.8	E	68.0	D	52.8	F	117.6	F	117.6	F	117.6	F	117.6		
N. Freeway Blvd. / Middle Access	Stop Sign	A	6.6	A	4.1	F	89.4	A	9.9	B	14.8	B	13.0	B	13.0	B	13.0		
N. Freeway Blvd. / East Access	Stop Sign	A	0.6	A	1.0	A	2.7	A	2.5	A	4.0	A	4.0	A	4.0	A	4.0		

NOTES:
¹ LOS = Level of Service
² Weighted average control delay in seconds
 Significant impacts are shaded.
 SOURCE: Dowling Associates, Inc., 2002.

An evaluation was performed to determine if the construction of additional roadways in the area would alleviate some of the cumulative intersection impacts. A discussion of recommended improvements to address existing conditions is included at the end of this section.

The mitigation measures proposed for intersections are described below and are shown graphically in Appendix D bound separately in Volume III of the Promenade at Sacramento Auto Loop Project DEIR. The effects of the mitigation measures on traffic operations are shown in tables also contained in Appendix D.

(a) Del Paso Road/National Drive (#2)

Three through lanes shall be provided in each direction on Del Paso Road in conformance with the North Natomas Community Plan²; and

Two lanes shall be added to the northbound National Drive approach to provide two left turn lanes, two through lanes, and one right turn lane; and

One lane shall be added to the southbound National Drive approach to provide two left turn lanes, one through lane, and one combination through-right turn lane.

(b) Del Paso Road/Northgate Boulevard (#3)

This mitigation measure would improve the level of service from LOS F to LOS C during peak conditions. The impact after mitigation would be *less than significant*.

A traffic signal shall be installed with protected left turn signal phasing for eastbound and westbound approaches and split signal phasing for the northbound and southbound approaches; and

For the eastbound Del Paso Road approach, the following shall be provided: one left turn lane, three through lanes, and one right turn lane with overlap signal phasing to allow eastbound Del Paso Road right turning traffic to proceed on a green arrow simultaneously with the northbound Northgate Boulevard left turning movement, and prohibit U-turns for the northbound left turning movement; and

For the westbound Del Paso Road approach, the following shall be provided: two left turn lanes, two through lanes, and a combination through-right turn lane; and

For the northbound Northgate Boulevard approach, the following shall be provided: two left turn lanes, a combination left-through lane, and two right turn lanes with overlap traffic signal phasing to allow northbound Northgate Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound Del Paso Road left turning movement, and prohibit U-turns for the westbound left turning movement.

2 The entire section of Del Paso Road will need to be widened to six lanes within the study area (from Gateway Park Boulevard to Northgate Boulevard) to provide acceptable traffic operations for cumulative conditions.

(c) Arena Boulevard (North Market Boulevard)/Gateway Park Boulevard (#5)

An overlap traffic signal phasing shall be provided to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement. This mitigation measure would improve the level of service from LOS D to LOS C during peak Saturday conditions. The impact after mitigation would be less than significant.

(d) North Market Boulevard/National Drive (#7)

This mitigation measure would improve the level of service from LOS F to LOS D during weekday peak conditions. The impact after mitigation would be *less than significant*.

Two lanes shall be added to the northbound National Drive approach to provide one left turn lane, one through lane, and one right turn lane with overlap phasing to allow northbound National Drive right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement; and

Two lanes shall be added to the southbound National Drive approach to provide one left turn lane, one through lane, and one right turn lane with overlap phasing to allow southbound National Drive right turning traffic to proceed on a green arrow simultaneously with the eastbound North Market Boulevard left turning movement, and prohibit U-turns for the eastbound left turning movement; and

Two lanes shall be added to the eastbound North Market Boulevard approach to provide two left turn lanes, one through lane, and one combination through-right turn lane; and

One lane shall be added to the westbound North Market Boulevard approach to provide one left turn lane, one through lane, and one combination through-right turn lane.

(e) North Market Boulevard North Freeway Boulevard (#8)

This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be *less than significant*.

A traffic signal shall be installed with protected left turn signal phasing for the westbound North Market Boulevard approach, provide overlap traffic signal phasing to allow northbound North Freeway Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement.

(f) North Market Boulevard/Northgate Boulevard (#9)

This mitigation measure would not improve the level of service in comparison to the level of service without the project. The mitigation measure would reduce delay at the intersection during congested periods below the delay that would occur without

the project. However, because it may not be feasible to add lanes in this location, the impact of the project after mitigation would be *significant and unavoidable*.

One lane shall be added to the southbound Northgate Boulevard approach to provide one left turn, two through lanes, and one combination through-right turn lane. However, it may not be feasible to add lanes at this location and

The right-turn channelizing island shall be removed and two lanes added to the eastbound North Market Boulevard approach to provide a left turn lane, a combination through-right turn lane, and two right turn lanes; and

The two westbound North Market Boulevard approach lanes shall be provided and provide one left turn lane and one combination through-right turn lane; and

A protected left-turn phasing for all intersection approaches shall be provided; and

An overlap traffic signal phasing shall be provided to allow eastbound North Market Boulevard right turning traffic to proceed on a green arrow simultaneously with the northbound Northgate Boulevard left turning movement, and prohibit U-turns for the northbound left turning movement.

(g) Truxel Road/Gateway Park Boulevard (#11)

Delays at this intersection would be higher after mitigation than with no project and no mitigation. Therefore, this impact would remain *significant and unavoidable*.

Implement Mitigation Measure 7.2-1 (e).

(h) Truxel Road/I-80 West Ramps (#13)

No feasible mitigation measures were identified; therefore, this impact would remain *significant and unavoidable*.

(i) Truxel Road/I-80 East Ramps (#14)

This mitigation measure would improve the level of service from LOS E or worse to LOS C during p.m. peak hour conditions. The impact after mitigation would be *less than significant*.

The existing lanes for southbound Truxel Road shall be modified to provide two through lanes and two right turn lanes. This modification would require the approval of Caltrans.

(j) Northgate Boulevard/I-80 East Ramps (#16)

No feasible mitigation measures were identified for this intersection. If the Northgate Boulevard bridge structure across I-80 were widened to add one lane to the southbound Northgate Boulevard approach, resulting in one through lane, one combination through-right turn lane, and one right turn lane, the level of service would be improved from LOS F to LOS E during p.m. peak hour conditions –

better than the LOS F conditions that would occur without the project. This modification would not be feasible; therefore, the impact would be *significant and unavoidable*.

(k) Truxel Road/San Juan Road (#17)

This mitigation measure would improve the level of service from LOS F to LOS D during the a.m. peak hour– better than the LOS F that would result without the project. The mitigation measure would improve the level of service from LOS E to LOS D during the p.m. peak hour – resulting in lower delay than would result without the project. During the Saturday peak hour, the mitigation measure would improve the level of service from LOS D or worse to LOS C. Therefore, the impact after mitigation would be *less-than-significant*.

Implement Mitigation Measure 7.2-1 (f); and

An overlap traffic signal phasing shall be provided to allow eastbound San Juan Road right turning traffic to proceed on a green arrow simultaneously with the northbound Truxel Road left turning movement, and prohibit U-turns for the northbound left turning movement.

(l) Gateway Park Boulevard / North Freeway Boulevard (#19)

This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be *less than significant*.

Two lanes shall be added to the northbound Gateway Park Boulevard approach to provide two left turn lanes, two through lanes, and two right turn lanes with overlap phasing to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Freeway Boulevard left turning movement, and prohibit U-turns for the westbound left turn movement; and

Two lanes to the southbound Gateway Park Boulevard approach shall be added to provide two left turn lanes, two through lanes, and one right turn lane; and

An overlap traffic signal phasing shall be provided to allow right turning traffic from the Natomas Village Center to proceed on a green arrow simultaneously with the northbound Gateway Park Boulevard left turning movement, and prohibit U-turns for the northbound left turn movement.

Impact

7.2-9 Freeways. (Cumulative)

The Proposed Project development scenario would increase traffic volumes on the freeway system. I-80 mainline operating conditions associated with the cumulative scenario are summarized in Tables 7.2-18 and 7.2-19, and cause the following *significant impacts* on I-80:

TABLE 7.2-18

PROPOSED PROJECT CUMULATIVE I-80 MAINLINE OPERATIONS

Location	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS	V/C	Vol	LOS	V/C	Vol	LOS	V/C	Vol
Eastbound									
I-5 to Truxel Rd.	D	0.74	6,078	D	0.90	7,346	C	0.65	5,290
Truxel Rd. to Northgate Blvd.	C	0.67	5,493	E	0.93	7,628	D	0.77	6,319
Northgate Blvd. to Norwood Ave.	D	0.80	5,287	F	1.33	8,763			
Westbound									
Norwood Ave. to Northgate Blvd.	F	1.29	8,502	E	0.99	6,507	D	0.87	5,713
Northgate Blvd. to Truxel Rd.	D	0.85	6,947	D	0.79	6,473	C	0.67	5,462
Truxel Rd. to I-5	C	0.67	6,521	C	0.73	7,117	C	0.55	5,375

NOTES:

¹ LOS = Level of Service² V/C = Volume / Capacity³ Vol = Traffic Volume

Shaded values indicate a potential significant impact.

SOURCE: Dowling Associates, Inc., 2002.

TABLE 7.2-19

PROPOSED PROJECT CUMULATIVE I-80 INTERCHANGE OPERATIONS

Ramp	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	LOS	d(D)	Vol	LOS	d(D)	Vol	LOS	d(D)	Vol
Eastbound I-80									
Truxel Rd. Off-Ramp	B	18.1	2449	C	21.8	2395	B	15.7	1491
Truxel Rd. South On-Ramp	D	1469	1347	F	2494	2286	F	2352	2156
Truxel Rd. North On-Ramp	C	21.4	517	D	29.6	391	C	24.8	364
Northgate Blvd. Off-Ramp	B	16.3	1388	C	22.7	1128	B	18.8	749
Northgate Blvd. South On-Ramp	C	26.1	719	F	44.6	1484	D	32.6	590
Northgate Blvd. North On-Ramp	C	27.8	463	F	46.6	779	F	34.7	473
Westbound I-80									
Northgate Blvd. Off-Ramp	F	41.2	2418	F	1630		D	29.0	914
Northgate Blvd. North On-Ramp	D	33.2	327	D	28.7	476	C	26.0	254
Northgate Blvd. South On-Ramp	C	585	536	C	1113	1020	C	446	409
Truxel Rd. Off-Ramp	F	20.7	2697	F	19.2	2014	F	16.2	2862
Truxel Rd. North On-Ramp	C	580	532	C	267	245	C	359	329
Truxel Rd. South On-Ramp	E	1897	1739	F	2632	2413	F	2668	2446

NOTES:

¹ LOS = Level of Service² Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.³ Vol = Traffic Volume

Shaded values indicate a potential significant impact.

SOURCE: Dowling Associates, Inc., 2002.

- Traffic would cause the freeway level of service to deteriorate from LOS E to LOS F on the I-80 mainline east of Northgate Boulevard during the Saturday peak hour.

- Traffic would cause the westbound I-80 diverge at the Northgate Boulevard interchange to operate at LOS F during the p.m. peak hour when the freeway would operate at LOS E (without the project, the diverge would operate at LOS D and the freeway would operate at LOS E).

Mitigation

7.2-9 Freeways. (Cumulative)

For eastbound I-80 east of Northgate Boulevard, it might be possible to mitigate impacts associated with the Proposed Project for this section of I-80; however, there are several constraints that make mitigation infeasible. A discussion of the potential mitigation and constraints that make mitigation infeasible are provided under the discussion of baseline conditions. In summary, adding lanes to I-80 would require widening the bridge across the Natomas East Main Drainage Canal and the Union Pacific Railroad tracks. Widening the freeway east of the bridge may require additional right-of-way or expensive construction methods to avoid right-of-way acquisition. The potential mitigation measure is considered infeasible; therefore, this impact would remain *significant and unavoidable*. For westbound I-80 at the Northgate Boulevard Off-Ramp, it might be possible to mitigate impacts associated with the project for the off-ramp; however, similar constraints to those listed above make mitigation infeasible. The potential mitigation would require providing a two lane exit ramp by adding an auxiliary lane 1300 feet in advance of the interchange ramp as required by Caltrans design standards. This mitigation measure would improve p.m. peak hour ramp operations to LOS D or better, but would also require widening the bridge across the Natomas East Main Drainage Canal and the Union Pacific Railroad tracks. Widening the freeway east of the bridge may require additional right-of-way or expensive construction methods to avoid right-of-way acquisition. The potential mitigation measure is considered infeasible; therefore, this impact would remain *significant and unavoidable*.

7.2-10 Transit Ridership. (Cumulative)

A light rail transit (LRT) extension, the Downtown-Natomas-Airport (DNA), is planned along Truxel Road with construction expected to commence in 2010. The North Natomas Composite Plan Transportation Evaluation (Kittleson & Associates, Inc. 1992) indicates that LRT would capture four percent of the trips that terminate within ¼ mile of a transit station, and three percent of the trips outside that limit. That assumption would indicate that LRT would serve about 540 weekday trips for current zoning – about 70 percent of the total weekday transit trips.

The Proposed Project development scenario would serve about 780 new weekday riders. The planned LRT system will be designed with a capacity to serve development according to the current zoning. During the peak hour of operation, the project would generate about 25 more LRT riders than current zoning – the equivalent of about one-half additional LRT car during the p.m. peak hour. This would be a *significant impact*.

*Mitigation***7.2-10 Transit Ridership. (Cumulative)**

Mitigation identified below would mitigate impacts to a *less-than-significant level*.

Funding shall be provided to expand LRT operations to accommodate the additional project demand for transit services.

Recommended Improvements to Address Existing Conditions

Due to the number of potential impacts identified, additional roadway improvements intended to lessen those impact were identified. The additional roadway improvements are identified as follows.

Extension of National Drive

An analysis was performed to determine the extent that construction of additional roadways would mitigate significant cumulative intersection impacts. The new roadways would include:

- Extending National Drive west of its existing terminus and connecting it to Gateway Park Boulevard, and
- Constructing a new roadway connection between North Freeway Boulevard and National Drive through the north portion of the Proposed Project site.

Although the analysis of the extension of new roadways was performed for PPB in the Promenade at Natomas/Sacramento Auto Loop DEIR, the differences in results would be similar for the Proposed Project. The effects of constructing these new roadways were evaluated using the same procedures as used for evaluation of the PPB without the new roadways. The analysis was performed by comparing traffic operations for the PPB with and without the new roadways. A comparison of levels of service at study area intersections is shown in Table 7.2-25.

The analysis of new roadway construction showed that there would be some shifting of travel patterns if National Drive were extended and a new roadway were constructed between North Freeway Boulevard and National Drive. The new roadways would have the following effects compared to the Proposed Project:

- The change in traffic patterns resulting from the construction of the new roadways would require a new traffic signal to mitigate project impacts at the North Market Boulevard/Sierra Point Drive intersection – the new signal would mitigate impacts to less-than-significant levels;
- The new roadways would increase traffic congestion at the North Market Boulevard/National Drive intersection, although the mitigation measure proposed for the Proposed Project without the new roadways would also mitigate impacts with the new roadways. The intersection would operate at

LOS C in either case. With the new roadways, delay would be about two seconds greater than without the new roadways.

7.3 Air Quality

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

IMPACTS AND MITIGATION

Method of Analysis

Construction and Operation Emissions Analysis

Construction of roadway and infrastructure facilities results in the temporary generation of emissions of ROG, NO_x, and PM₁₀. Construction-related emissions result from construction equipment exhaust and fugitive dust from land clearing, earthmoving, and wind erosion of exposed soil. Additionally, asphalt-paving activities generate emissions of ROG. Industrial source complex-short term 3 (ISC-ST3) was used to estimate PM₁₀ concentrations during construction activities and project operation. All ROG, NO_x and CO associated with construction and operation of the project and alternatives were estimated using URBEMIS7G. Operational emissions were also estimated using URBEMIS7G. Trip generation rates and the number of daily trips associated with the various land uses proposed for the project and alternatives (i.e., commercial, office, industrial, etc.) were obtained from the traffic analysis prepared by Dowling Associates, Inc. See section 7.2, Transportation and Circulation.

The trip generation rates estimated in the traffic analysis are presented in Table 7.3-4, below. These generation rates vary among land uses.

TABLE 7.3-4	
TRIP GENERATION RATES FOR THE PROPOSED PROJECT	
Proposed Project	
Shopping Center	40.33/k sq ft
Office	8.28/ k sq ft
Note: Trip generation for Alternative AB is measured in terms of employees based on the traffic analysis.	
Source: Dowling and Associates, January 2002.	

Carbon Monoxide Analysis

All CO analyses were done using the methodology outlined in the Caltrans/U.C. Davis *CO Protocol*, which was recreated in a spreadsheet. All traffic data were obtained from the traffic analysis prepared by Dowling Associates, Inc. CO modeling was performed for six intersections operating at the worst LOS and with the longest time delays. These intersections included:

- Northgate Boulevard /Del Paso Road,
- Truxel Road/Arena Boulevard,
- N. Market Boulevard /National Drive,
- N. Market Boulevard /N. Freeway Boulevard,
- Truxel Road/Gateway Park Boulevard, and
- Northgate Boulevard /I-80 East Ramps.

Output files from the CALINE4 microscale dispersion model are presented in Appendix E. Please see Chapter 4, Project Alternatives, for a complete discussion of the specific land uses to be developed under each project alternative.

The Sacramento Valley is subject to various wind patterns that disperse and distribute pollutants. The predominant annual and summer wind pattern is the full sea breeze, commonly referred to as the Delta breezes. These cool winds originate from the Pacific Ocean and flow through a sea-level gap in the Coast range called the Carquinez Straits. In the winter season, northerly winds predominate. Wind direction in the Sacramento Valley is influenced by the predominant wind flow pattern associated with the season.

Vertical and horizontal movement of air is an important atmospheric component involved in the dispersion of air pollutants. Movement of air allows for the dispersion and subsequent dilution of air pollutants. Without movement, air pollutants can collect and concentrate in a single area, increasing the health hazards association with air pollutants.

Persistent inversions occur frequently in the Sacramento Valley, especially during late fall and spring, and act to restrict vertical dispersion of pollutants released near ground level. Inversions characteristic to Sacramento County involve nighttime cooling of air near the valley surface. The sun warms the air above the nocturnally cooled surface, creating the inversion that prohibits vertical mixing.

Air Pollutants and Ambient Standards

Both the U. S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) have established ambient air quality standards for common pollutants. These ambient air quality standards indicate levels of contaminants that represent safe levels to avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents.

The federal and State ambient air quality standards summary and associated health effects are presented in Table 7.3-1. The federal and State ambient standards were developed independently with differing purposes and methods, although both processes are based on avoiding health-related effects. As a result, the federal and State standards differ in some cases. In general, the California standards are more stringent.

Ozone

Ozone (O_3) is a secondary pollutant that forms as a result of the interaction between ultraviolet light, Reactive Organic Gases (ROG) and nitrogen oxide (NO_x). ROG and NO_x are primary pollutants that are emitted directly into the environment, generated by motor vehicle operation and emitted as exhaust. Secondary or indirect pollutants are formed in the atmosphere, usually as the result of a chemical reaction involving primary pollutants. The major effects of ozone and the other components of photochemical smog include reductions in plant growth and crop yield; chemical deterioration of various metals; and irritation of respiratory systems and eyes.

In addition to the adverse effects on human health noted in Table 7.3-1 ozone is the pollutant primarily responsible for damage to crops and natural vegetation in California. Ozone injury to plants can occur as either acute injury (i.e., tissue death or death of the whole plant) at moderate to high concentrations (0.15 ppm and above for two to eight hours), or as chronic injury (e.g., reduced

crop yield or impaired ecosystem stability) resulting from repeated exposure to O₃ at low to moderate concentrations (0.04 to 0.2 ppm for a few days to several months).

TABLE 7.3-1

AMBIENT AIR QUALITY STANDARDS

Pollutant	State Standard Concentration/ Averaging Time	Federal Standard Concentration/ Averaging Time	Public Health Effects
Ozone	0.09 ppm, 1-hr. avg. >	0.12 ppm, 1-hr avg. > (before July 16, 1997) 0.08 ppm, 8-hr avg. > (adopted July 16, 1997)	(a) Short-term exposures: (1) Pulmonary function decrements and localized lung edema in humans and animals. (2) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (b) Long-term exposures: Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (c) Vegetation damage; (d) Property damage.
Carbon Monoxide	9.0 ppm, 8-hr avg. > 20 ppm, 1-hr avg. >	9.0 ppm, 8-hr avg. > 35 ppm, 1-hr avg. >	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; (d) Possible increased risk to fetuses.
Nitrogen Dioxide	0.25 ppm, 1-hr avg.	0.053 ppm, ann. avg. >	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical changes; (c) Contribution to atmospheric discoloration.
Sulfur Dioxide	0.04 ppm, 24-hr avg. > 0.25 ppm, 1-hr avg. >	0.03 ppm, ann. avg. > 0.14 ppm, 24-hr avg. >	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath, and chest tightness, during exercise or physical activity in persons with asthma.
Suspended Particulate Matter (PM ₁₀)	30 µg/m ³ PM ₁₀ , ann. geom. mean > 50 µg/m ³ PM ₁₀ , 24-hr avg. >	50 µg/m ³ PM ₁₀ , annual arithmetic mean > 150 µg/m ³ PM ₁₀ , 24-hr avg. > (before July 16, 1997) 15 µg/m ³ PM _{2.5} , annual arithmetic mean > 50 µg/m ³ PM _{2.5} , 24-hr avg. > (adopted July 16, 1997)	(a) Excess deaths from short-term exposures and exacerbation of symptoms in sensitive patients with respiratory disease; (b) Excess seasonal declines in pulmonary function, especially in children.
Sulfates	25 µg/m ³ , 24-hr avg. > =		(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation disease; (e) Degradation of visibility; (f) Property damage.
Lead	1.5 µg/m ³ , 30-day avg. > =	1.5 µg/m ³ , calendar quarter >	(a) Increased body burden; (b) Impairment of blood formation and nerve conduction.
Visibility-Reducing Particles	In sufficient amount to reduce the visual range to less than 10 miles at relative humidity less than 70 percent, 8-hour average (10 am -6 pm)		Visibility impairment on days when relative humidity is less than 70 percent.

Source: UCLA Northwest Campus Development Revised Phase II FSEIR, June 1997, Table 1, P. III-B-9; U.S. EPA, 1996-97.

Based on the designation criteria established by section 40921.5 of the California Health and Safety Code, the SVAB is classified as serious nonattainment for ozone. Because the District is responsible for a serious nonattainment area, it is subject to stringent requirements in the California Clean Air Act (CCAA) and must apply all feasible measures to reduce emissions.

The causes of the violation of air quality standards for ozone are complex. Unlike many air pollutants, O_3 is not emitted directly into the atmosphere, but is produced in the atmosphere by a complex series of photochemical reactions involving ROG and NO_x . No single source accounts for most of the ROG and NO_x emissions because many sources are spread throughout the basin. Because ozone formation requires energy from the sun, elevated concentrations of ozone occur mostly during the summer months.

Carbon Monoxide

Carbon monoxide (CO) is an odorless, invisible gas usually formed as the result of incomplete combustion of organic substances. High levels of CO can impair the transport of oxygen in the bloodstream, thereby aggravating cardiovascular disease and causing fatigue, headaches, and dizziness.

In contrast to ozone, CO is a localized problem because CO is a non-reactive pollutant with one major source, motor vehicles. Ambient CO distributions closely follow the spatial and temporal distributions of vehicular traffic, and are strongly influenced by meteorological factors such as wind speed and atmospheric stability.

The SVAB has been redesignated as attainment for CO and is expected to remain in attainment in coming years.

Particulate Matter

Particulate matter can cause respiratory problems from small particles being inhaled deep into the lungs. Due to health impacts of breathing the particulates, the total suspended particulate standard was revised to reflect particulates that are small enough to be considered "inhalable" (i.e., 10 microns or less in size), referred to as PM_{10} .

Particulate matter is particles in the atmosphere resulting from many sources, including fume-producing industrial and agricultural operations, motor vehicle tires, combustion, atmospheric photochemical reactions and burned agricultural waste. Natural activities also introduce particulates into the atmosphere. Wind-raised dust is one such source.

The entire SVAB is nonattainment for PM_{10} . The major components of PM_{10} are dust particles, nitrates, and sulfates. PM_{10} is directly emitted into the atmosphere as a by-product of fuel combustion, wind erosion of soil, and unpaved agricultural roads. Small particles are also created in the atmosphere through chemical reactions.

The EPA established $PM_{2.5}$ standards in recognition of increased concern over particulates 2.5 microns or less in diameter. According to information provided by EPA, designations for the new $PM_{2.5}$ standards by the EPA will begin in the year 2002 with attainment plans due by 2005 for regions that violate the standards. $PM_{2.5}$ measurements have begun to be conducted at three

locations in the SVAB to determine if the County is in attainment under the new federal PM_{2.5} standards. A PM_{2.5} monitoring network plan has been developed by the CARB and local air districts in California and includes several monitoring stations in Sacramento County. Data will be collected from these three monitoring stations for at least three years before a determination of attainment can be made.

Nitrogen Oxides

The SVAB is in attainment with federal and State NO_x standards. Nitrogen oxide is an air quality concern because it acts as a respiratory irritant and is a precursor to O₃. Nitrogen oxides are produced by fuel combustion in industrial stationary sources, motor vehicles, ships, aircraft, and rail transit.

Sulfur Dioxide

Sulfur dioxide (SO₂) is a combustion product of sulfur or sulfur-containing fuels such as coal. This pollutant has in the past been well below the federal and State standards; therefore, it has not been recorded for the SVAB.

Current Air Quality

The following is a description of current air quality in the vicinity of the project site.

Air Quality Monitoring

The Sacramento Metropolitan Air Quality Management District (SMAQMD) and the CARB maintain several air quality monitoring stations in the Sacramento area. Air quality data for the period 1999 through 2001 from monitoring stations near the project site are presented in Table 7.3-2. Data from 2001 is the most recent data available. Because many of the stations do not monitor all pollutants, a distinct set of monitoring stations were chosen for each pollutant that would best represent conditions at the project site, or in the case of ozone, the regional conditions.

Most of the standards shown in Table 7.3-1 are met in Sacramento County, with the exception of ozone (State and federal) and PM₁₀ (State 24-hour and annual). Ozone and PM₁₀ are regional problems affecting the entire SVAB.

At the monitoring stations, presented in Table 7.3-2, the State ozone standard has been exceeded up to 26 times each year during the past three years. Levels in excess of the federal ozone standard have also been recorded. Substantial year-to-year variations in monitored ozone levels are common. However, no clear trend in ozone levels are demonstrated by monitoring results from the 1990's.

The State 24-hour PM₁₀ standard has been exceeded between 3 percent and 13 percent of the time. The annual PM₁₀ standard has been exceeded during the three year period. Monitoring for PM_{2.5} has begun in Sacramento County at two locations. The T Street site, in the downtown area, began sampling in December 1998. The Del Paso Manor site, in North Sacramento, began sampling in January 1999. Preliminary data indicate that violations of the 24-hour PM_{2.5} federal standard have occurred at both sites.

TABLE 7.3-2

SUMMARY OF CARBON MONOXIDE, OZONE, AND PM₁₀ MONITORING DATA

Station/Location	Yearly Monitoring Data		
	1999	2000	2001
Carbon Monoxide			
Del Paso Manor			
Highest 8-hour concentration (ppm)	5.67	4.60	5.28
Days above standard (a)	0	0	0
T Street			
Highest 8-hour concentration (ppm)	5.73	4.43	4.35
Days above standard (a)	0	0	0
El Camino/Watt Avenue			
Highest 8-hour concentration (ppm)	6.58	6.25	4.75
Days above standard (a)	0	0	0
Ozone 1-hour			
Del Paso Manor			
1st High (ppm)	0.131	0.124	0.142
2nd High (ppm)	0.123	0.123	0.118
Days above standard (b)	12	13	11
T Street			
1st High (ppm)	0.116	0.101	0.113
2nd High (ppm)	0.107	0.098	0.110
Days above standard (b)	6	3	2
Bruceville Road			
1st High (ppm)	0.16	0.104	0.112
2nd High (ppm)	0.118	0.99	0.110
Days above standard (b)	16	3	10
Ozone 8-hour			
Del Paso Manor			
1st High (ppm)	0.110	0.110	0.107
2nd High (ppm)	0.107	0.096	0.097
Days above standard (b)	6	9	6
T Street			
1st High (ppm)	0.088	0.079	0.094
2nd High (ppm)	0.088	0.077	0.087
Days above standard (b)	4	0	3
Bruceville Road			
1st High (ppm)	0.104	0.094	0.092
2nd High (ppm)	0.096	0.084	0.092
Days above standard (b)	7	1	3
PM₁₀			
Branch Center Road			
1st High (ppm)	86.0	56.0	70.0
2nd High (ppm)	80.0	54.0	65.0
Days above standard (b)	66	12	18
T Street			
1st High (ppm)	99.0	64.0	89.0
2nd High (ppm)	98.0	59.0	83.0
Days above standard (b)	48	21	18
Notes: (a) Days above standard = days above state 8-hour standard of 9 ppm. (b) Days above standard = days measured above state 1-hour standard of 0.09 ppm. (c) Days above standard = calculated days above state standard.			
SOURCE: California Air Resources Board - http://www.arb.ca.gov .			

Monitored CO levels have been on a downward trend over the last several years and have been relatively stable the last few years. The downward trend over the last several years is primarily a result of the use of oxygenated gasoline during the winter season when CO can be a factor. CO levels exceeded the State and federal 8-hour standard several times in the early 1990s. However, no violations were recorded during the last three years, and Sacramento County was declared in attainment for the federal CO standard in March 1998.

Toxic Air Contaminants

In addition to the criteria air pollutants, another group of substances called Toxic Air Contaminants (TACs) are known to be highly injurious, even in small quantities to humans. TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic) adverse human health effects (i.e., injury or illness). There are hundreds of substances that can be toxic when inhaled, but air quality standards have not been set for most of them.

TACs can be emitted from a variety of common sources, including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. Natural source emissions include windblown dust and wildfires. Farms and construction sites can add to air toxic emissions. Research facilities can also be a source of toxic air contaminants. TACs include both organic and inorganic chemical substances. Examples include certain chlorinated hydrocarbons, such as solvents, and certain metals and asbestos.

Sacramento County does not currently have a monitoring station for toxic air contaminants. Since the project area is undeveloped and consists of agricultural fields, there are no known sources emitting TACs within the site. Similarly, land surrounding the site is primarily agricultural, with some rural residential uses to the west. None of these existing land uses would emit TACs.

As previously discussed, the project would consist of retail, commercial and office uses. It is anticipated that none of these uses would emit TACs. However, diesel trucks would be used to deliver materials and goods to retail stores within the project site. Diesel particulate matter was identified as a TAC by the CARB in 1998.

Emissions Inventory

Table 7.3-3 presents a description of emissions generated in Sacramento County for 2000. The description of emissions (referred to as an emissions inventory) for 2000 is the most recent data available. Although the data are somewhat dated, they continue to describe general characteristics of emissions in Sacramento County.

In addition to describing emissions of CO and PM₁₀, Table 7.3-3 presents emissions estimates for ROG and NO_x. ROG and NO_x emissions are referred to as “ozone precursor” emissions because these two categories of emissions undergo photochemical process to generate ground-level ozone.

There are two main categories of emission sources in any area: stationary and mobile. The main stationary source of CO in Sacramento County is fuel combustion. The main stationary source of ROG in Sacramento County is solvent use, while commercial and industrial fuel combustion represents the largest source of NO_x emissions. Mineral processes (e.g., aggregate extraction)

TABLE 7.3-3							
2000 EMISSION INVENTORY FOR SACRAMENTO COUNTY (TONS PER DAY)							
Summary Category Name	CO ₂	ROG	CO	NO _x	SO _x	PM	PM ₁₀
Stationary Sources							
Fuel Combustion	0.57	0.23	1.68	3.51	0.13	0.31	0.31
Waste Disposal	14.46	0.20	0.21	0.07	0.01	0.08	0.08
Cleaning and Surface Coatings	11.72	10.02	0.00	0.00	–	--	--
Petroleum Production	6.62	1.86	–	–	–	–	–
Industrial Processes	1.72	1.43	0.35	0.16	0.01	2.70	1.61
Total Stationary Sources	35.14	13.74	2.40	3.74	0.14	3.08	2.00
Area-Wide Sources							
Solvent Evaporation	17.47	15.44	–	–	–	0.01	0.01
Miscellaneous Processes	33.33	5.59	41.34	2.25	0.10	80.23	42.72
Total Area-Wide Sources	50.80	21.03	41.34	2.25	0.10	80.23	42.72
Mobile Sources							
On-Road Motor Vehicles	58.57	54.04	564.59	79.95	1.38	2.22	2.19
Other Mobile Sources	11.99	10.81	99.14	26.17	2.72	1.69	1.66
Total Mobile Sources	70.56	64.85	663.73	106.12	4.11	3.91	3.85
Natural (Non-Anthropogenic) Sources							
Natural Sources	0.03	0.02	0.20	0.00	–	0.03	0.03
Total Natural sources	0.03	0.02	0.20	0.00	–	0.03	0.03
Total Sacramento County	156.53	99.65	707.51	112.11	4.35	87.26	48.60
Note:	Inventory amounts reported in tons per day.						
Source:	CARB http://www.arb.ca.gov . Accessed information 01/14/02.						

represent the largest source of stationary source PM₁₀ emissions in Sacramento County. The primary mobile source of CO, ROG, NO_x, and PM₁₀ pollutants, are light-duty passenger vehicles.

Existing Conditions-Proposed Project

Existing Sensitive Receptors

The northern portion of the project site is bordered by series of warehouses and other light industrial facilities, the Natomas Marketplace Shopping Center is located southwest of the project site, across Truxel Road. Interstate 80 borders the southeastern portion of the project site. There are no residential homes adjacent to the project site; however, there are some residential areas located approximately one quarter to a half mile to the northeast and some newly constructed homes to the west of the project site beyond the Natomas Marketplace Shopping Center. Adjacent land surrounding the project site to the west and east is largely undeveloped and consists of open fields.

REGULATORY CONTEXT

On both the federal and State levels, a distinction is made for regulatory purposes between criteria air pollutants and toxic air pollutants. Criteria air pollutants are those for which health-based concentration standards were first promulgated under the 1970 Amendments to the Federal Clean Air Act (FCAA). Regulation of criteria air pollutants is achieved through federal and state ambient air quality (concentration) standards and emission limits for individual sources. Air toxics are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e. cancer-causing) adverse human health effects but for which ambient air quality standards have not been set.

The CARB regulates mobile emission sources including; construction equipment, trucks and automobiles and oversees the activities of regional and county air districts. The FCAA required the CARB to divide the state into air basins based upon similar meteorological features and with consideration of political boundaries. The eleven-county SVAB includes the project site. The CARB has the responsibility to implement regulations controlling mobile sources and to oversee the local and regional air quality agencies. On a regional level, the SMAQMD is responsible for air quality regulation in the Sacramento County portion of the SVAB.

Federal

As required by the FCAA, the EPA established National Ambient Air Quality Standards (NAAQS) for: O₃, CO, nitrogen dioxide (NO₂), SO₂, PM₁₀, and lead (Pb), see Table 7.3-1. These standards represent the levels of air quality necessary, with an adequate margin of safety to protect the public health and welfare.

The FCAA required the states to classify basins (or portions thereof) as either being in “attainment” or “non attainment” with respect to criteria air pollutants, based on whether or not the NAAQS had been achieved and to prepare air quality plans containing emission reduction strategies for those areas designated as “non-attainment.” The project site lies in Sacramento County, within the SVAB. The SMAQMD has the responsibility to monitor and regulate air quality within the region. The project site is designated as severe non-attainment for the NAAQS for O₃. The severe non-attainment designation requires attainment of the O₃ standard by 2005.

State

The State of California has established its own ambient standards for the criteria pollutants. These standards are referred to as the State Ambient Air Quality Standards (SAAQS) and are equal to or more stringent than their NAAQS counterparts. SAAQS have also been established for certain pollutants not covered by the NAAQS, such as sulfide and vinyl chloride. In 1988, California passed the California Clean Air Act (CCAA) which, like its federal counterpart, called for designations of areas as attainment or non-attainment in reference to the SAAQS. In addition, a region can be designated non-attainment transitional or unclassified. The transitional designation recognizes a region's improving air quality but still maintains some regulatory restrictions and obligations. The unclassified designation is given for a region where data is absent or too limited for designation. Sacramento County has been designated as non-attainment for SAAQS for O₃ and PM₁₀ and attainment for CO. Sacramento County is designated attainment for all other criteria pollutants.

Local

Sacramento Metropolitan Air Quality Management District (SMAQMD)

The SMAQMD is the regional agency empowered to regulate air pollutant emissions from stationary sources in Sacramento County. The Proposed Project is within the jurisdiction of the SMAQMD. The SMAQMD regulates air quality through its permit authority over most types of stationary sources and through its planning and review activities.

The Federal Clean Air Act requires nonattainment areas to prepare air quality plans that include strategies for achieving attainment. In response to this requirement, the SMAQMD has prepared the 1994 *Sacramento Area Regional Ozone Attainment Plan*, which is the current federally approved air quality plan for the Sacramento metropolitan area, and it predicts attainment of the national one-hour ozone standard by 2005.¹ This *Sacramento Area Regional Ozone Attainment Plan* is a component of the State Implementation Plan and is used to bring the region into compliance with federal and State air pollutant standards. The ozone plan relies heavily on stationary source control and on statewide mobile source control programs. With respect to the national carbon monoxide standard, the revised SIP includes a "maintenance" plan, which demonstrates how Sacramento County will continue to maintain concentrations below the standard.

In addition to the ozone plan, SMAQMD also prepared the *1991 Air Quality Attainment Plan* that includes five basic programs to reduce the amount of pollutants generated. These programs consists of (1) vehicle and fuel management, (2) transportation control measures, (3) indirect source control measures, (4) stationary source control, and (5) public education. One of the purposes of the vehicle and fuel management program is to accelerate the phasing-in of cleaner burning alternative fuels as well as low and zero emission vehicles. Indirect source control measures that are to be implemented by local agencies include; parking space limitations, increased parking fees, bicycle and pedestrian facilities, and alternative modes of transportation. The *1991 Air Quality Attainment Plan* has been updated on a triennial basis. The *Sacramento Area Ozone Attainment Plan* was the first triennial update. The most recent update is the *1997 Triennial Report and 1998 Rulemaking Schedule*, which calls for the continuation of the strategies outlined in earlier plans.

The SMAQMD has also adopted various rules and regulations to reduce the generation of criteria air pollutants.

City of Sacramento General Plan

The City of Sacramento General Plan does not contain an Air Quality Element and there are no specific goals or policies that pertain to air quality.

North Natomas Community Plan

The desire for better air quality shaped many of the air quality policies found in the NNCP. The community plan encourages land use planning that promotes an interdependence of transit and land use, locates commercial, parks, schools, and community services within convenient proximity to

1 SMAQMD. Sacramento Area Regional Ozone Attainment Plan. November 15, 1994.

residential and employment areas, promoted mixed use neighborhoods with residential and employment centers within walking distance and supports planning ahead for electric and other zero emission or low emission vehicles.² Following is a summary of air quality policies listed in the plan that apply to the Proposed Project:

Guiding Policies

- A. Development in North Natomas shall comply with the Federal and the California Clean Air Acts.
- B. The Air Quality Mitigation Strategy shall have as a goal a 35 percent community wide daily reduction in vehicle and other related reactive organic compound emissions at buildout.
- C. Structure the community and each development to minimize the number and length of vehicle trips.

Implementation Policies

The focus of the implementing policies is on reducing emissions of ozone precursors, including, first and foremost, reactive organic gases (ROG). Localized carbon monoxide problems are amendable to solution through TSM and localized traffic flow improvement measures, design and arrangement of site, structures, parking and landscaping.

Three types of measures are included in this strategy: 1) site design 2) target area and 3) community wide. An example of a site design measure is the orientation of the building to promote transit use. A target area measure might include the reduction in parking allowed because the site is located within ¼ mile of a light rail station. And a community wide measure might include the provision of a shuttle system for the community. The Transportation Management Association (TMA) will be responsible for funding and managing some of the target area and community wide measures. Each of these measures would contribute to the development's required percentage of emission reduction.

Achieve a 35 Percent Reduction in Emissions. The City Planning and Public Works Department with the SMAQMD will verify that a 35 percent community-wide reduction in projected ROG emissions will result from successful implementation of the Air Quality Strategy.

Non-Residential Development: All new non-residential developments must reduce reactive organic gas emissions by a minimum of 50 percent compared to the single occupant vehicle baseline.

Emission credit will be allowed for the provision of electric vehicles and/or support facilities to achieve the required 35 percent reduction in mobile emissions. Emission credit will also be allowed for reducing other mobile and are type pollutant sources as means to offset mobile source reduction. The combined emission reduction effort of all residential and non-residential development must meet or exceed the required 35 percent community wide reduction.

Promote Electric, Other Zero Emission, and Low-Emission Vehicle Use: Encourage the use of electric, other zero-emission, and low emission vehicles by providing sufficient, convenient, electric vehicle charging and parking facilities in the planning of residential and employment developments.

Following are parking management policies presented in the North Natomas Community Plan. These policies are related to the proposed project since it will result in the construction of office buildings as well as a retail component. Implementation of these policies are meant to minimize air quality impacts by promoting alternative forms of transportation yet allow for an adequate amount of parking when and where required.

² City of Sacramento. North Natomas Community Plan. Adopted by City Council Resolution No. 94-259. May 3, 1996. Amended April 16, 1996. p. 47-50.

Parking Management Guiding Policies

- A. Parking standards should be set to reasonably accommodate employees and clients for whom alternate mode commuting is not a realist option.
- B. Parking standards must recognize the capacity of transit service and alternative mode commute options and the availability of off-site, on street parking facilities.
- C. Parking standards must maintain the economic viability of the development and should not place any geographic area at a comprehensive disadvantage.
- D. Parking standards must protect residential neighborhoods.
- E. Parking standards should include provisions for charging electric vehicles and electric shuttle buses, as well as appropriately sized parking spaces.
- F. Sufficient electric service must be provided in parking areas to support the electric transportation needed to be consistent with the air quality requirement of each developer.

Implementing Policies

Parking Space Reduction: Parking standards and TSM goals must be synchronized. For any non-residential development, the required off-street parking spaces may be reduced subject to the approval of a Special Permit by the following percentages:

Office	25%
Medical Office	8%
Commercial	5%
Industrial	10%

Nonresidential projects located along transit routes and especially near LRT stations can reduce parking by an additional 10 to 20 percent subject to a special permit.

Parking Ownership: Parking should be maintained in the same ownership and on the same property as the major land use it is intended to serve. The City discourages off-site, short-term leased parking.

Reciprocal Parking: Reciprocal parking between compatible uses (peak-use occurs at different hours) should be encouraged wherever possible to provide adequate parking spaces while minimizing the quantity of parking (and land area) needed. Day uses can share parking facilities with evening uses in order to minimize parking spaces required, provided that peak use times do not overlap. Maneuvering and access easements shall be encourage wherever feasible.

Joint Use Parking: Joint use parking agreements between public agencies, between public agencies and private owners, and between private owners for park-n-ride lots are encouraged wherever feasible. For example, a park located near a light rail station could joint use parking for the park and the transit station.

Reduced Parking for Support Uses: Reduce parking component for neighborhood or support commercial component of a mixed use project when the use is ancillary to that residential, office, and/or industrial use. A use is ancillary when it is patronized predominantly by the surrounding development.

IMPACTS AND MITIGATION

Method of Analysis

Construction and Operation Emissions Analysis

Construction of roadway and infrastructure facilities results in the temporary generation of emissions of ROG, NO_x, and PM₁₀. Construction-related emissions result from construction equipment exhaust and fugitive dust from land clearing, earthmoving, and wind erosion of exposed soil. Additionally, asphalt-paving activities generate emissions of ROG. Industrial source complex-short term 3 (ISC-ST3) was used to estimate PM₁₀ concentrations during construction activities and project operation. All ROG, NO_x and CO associated with construction and operation of the project and alternatives were estimated using URBEMIS7G. Operational emissions were also estimated using URBEMIS7G. Trip generation rates and the number of daily trips associated with the various land uses proposed for the project and alternatives (i.e., commercial, office, industrial, etc.) were obtained from the traffic analysis prepared by Dowling Associates, Inc. See section 7.2, Transportation and Circulation.

The trip generation rates estimated in the traffic analysis are presented in Table 7.3-4, below. These generation rates vary among land uses.

TABLE 7.3-4	
TRIP GENERATION RATES FOR THE PROPOSED PROJECT	
Proposed Project	
Shopping Center	40.33/k sq ft
Office	8.28/ k sq ft
Note: Trip generation for Alternative AB is measured in terms of employees based on the traffic analysis.	
Source: Dowling and Associates, January 2002.	

Carbon Monoxide Analysis

All CO analyses were done using the methodology outlined in the Caltrans/U.C. Davis *CO Protocol*, which was recreated in a spreadsheet. All traffic data were obtained from the traffic analysis prepared by Dowling Associates, Inc. CO modeling was performed for six intersections operating at the worst LOS and with the longest time delays. These intersections included:

- Northgate Boulevard /Del Paso Road,
- Truxel Road/Arena Boulevard,
- N. Market Boulevard /National Drive,
- N. Market Boulevard /N. Freeway Boulevard,
- Truxel Road/Gateway Park Boulevard, and
- Northgate Boulevard /I-80 East Ramps.

Output files from the CALINE4 microscale dispersion model are presented in Appendix E. Please see Chapter 4, Project Alternatives, for a complete discussion of the specific land uses to be developed under each project alternative.

Standards of Significance

For the purposes of this EIR, an impact is considered significant if the Proposed Project or Alternatives would result in:

- A predicted violation of the CO ambient air quality standards due to project traffic on the local street network;
- An increase in emissions of an ozone precursor or PM₁₀ exceeding the SMAQMD or YSAQMD recommended thresholds of significance. The SMAQMD and YSAQMD considers the following increases in emissions to represent a significant adverse impact:

Pollutant	SMAQMD Construction	SMAQMD Operation	YSAQMD Construction and Operation
ROG	None	65 lbs/day	82 lbs/day
NO _x	85 lbs/day	65 lbs/day	82 lbs/day
PM ₁₀	30 µg/m ³	30 µg/m ³³	150 lbs/day

Source: EIP Associates, January 2003.

- Result in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard; or
- Exceed the 10 in 1 million risk threshold for TACs.

Impacts and Mitigation Measures

Impact

7.3-1 Construction-related PM₁₀ emissions. (Project-specific)

The ISC-ST3 model was used to estimate all fugitive dust construction emissions for the Proposed Project. It was uniformly assumed for all modeling scenarios that 15 acres per day would be graded and that the construction activities would occur within one year. It was also assumed that construction activities would occur during the year 2004. Construction emissions for the Proposed Project are depicted in Table 7.3-5.

Construction activities associated with the project include site clearing, grading, trenching and other activities that result in the generation of dust and PM₁₀. As previously noted, the SVAB is designated as non-attainment for the State PM₁₀ standard.

Under the Proposed Project, approximately 6.19 µg/m³ of PM₁₀ would also be generated on any given day. This assumes that a maximum of 15 acres per day are graded. The estimated PM₁₀

3 µg/m³ is the measurement of the concentration of particulate matter in a cube that is one meter on all sides.

	ROG	NO _x	CO	PM ₁₀	SO _x
SMAQMD Thresholds		85 lbs/day		30 µg/m ³	
Proposed Project					
Construction	45.48	565.58	12.33	6.19	45.13
Exceeds Threshold?	No	Yes	-	No	-

Source: EIP Associates.. URBEMIS7G and ISC-ST3, January 2003.

emissions would not exceed SMAQMD's threshold of 30 µg/m³, therefore, this impact would be *less than significant*.

Mitigation

7.3-1 Construction-related PM₁₀ emissions. (Project-specific)

No mitigation would be required for the Proposed Project.

Impact

7.3-2 Construction-related ozone precursor emissions. (Project-specific)

CO, ROG, and NO_x are emitted from the operation of diesel construction equipment, while ROG is generated from asphalt off-gassing (application of asphalt, not asphalt itself, releases vapors). Using URBEMIS7G, it was estimated that approximately 22 pieces of diesel powered equipment would be used on the site throughout construction of the project. In addition to mobile equipment, stationary diesel equipment, such as generators would also be used.

As shown in Table 7.3-5, under the Proposed Project, 45.48 lbs/day of ROG, 565.58 lbs/day of NO_x and 12.33 lbs/day of CO would be generated by construction equipment. Under the Proposed Project, NO_x emissions would exceed the district's adopted thresholds of 85 lbs/day, resulting in a *significant impact*.

Mitigation

7.3-2 Construction-related ozone precursor emissions. (Project-specific)

Sacramento County is currently in attainment for CO and the SMAQMD has not adopted any CO thresholds. Consequently, the Proposed Project would not violate SMAQMD thresholds and no mitigation is required. However, construction activities associated with the Proposed Project would result in the generation of NO_x pollutants that would exceed the SMAQMD threshold of 85 lbs/day, resulting in a significant impact. Implementation of the following mitigation measures would reduce the amount of NO_x emissions created during construction activities, but not to a level that is below the district thresholds. Therefore, this impact would remain *significant and unavoidable*.

To reduce NO_x emissions associated with construction activities, the prime contractor shall provide a plan for approval by the City of Sacramento and SMAQMD demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction project, and operated by either the prime contractor or any subcontractor, shall achieve a fleet-averaged 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average; and

The prime contractor shall submit to the City of Sacramento and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during the construction project. The inventory shall include the horsepower rating, engine production year, and 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 30-day period in which no construction activity occurs.

The prime contractor shall ensure that emission from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and 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 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 30-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 mitigation measure shall supercede other SMAQMD or state rules or regulations.

Impact

7.3-3 Project operational emissions. (Project-specific)

Operational emissions associated with the Proposed Project would be generated primarily by vehicles traveling to and from the site. However, area source emissions, such as those from natural gas associated with heating facilities, would also contribute to operational emissions. Unlike construction emissions, operational emissions are on-going and would affect the air quality more severely than short-term construction emissions.

As indicated in Table 7.3-6, operational emissions associated with the Proposed Project are estimated to be approximately 375 lbs/day of ROG, 393 lbs/day of NO_x, 3,274 lbs/day of CO, and 3.36 µg/m³ of PM₁₀. Under the Proposed Project, ROG and NO_x emissions would exceed SMAQMD's thresholds of 65 lbs/day, resulting in a *significant impact*.

Mitigation

7.3-3 Project operational emissions. (Project-specific)

The majority of long-term operational pollutants would be generated by vehicles traveling to and from the project site. The mitigation measures presented below are in keeping with the policies presented in the NNCP that promote alternative forms of transportation and making the project

TABLE 7.3-6

OPERATIONAL EMISSIONS FOR THE PROPOSED PROJECT

SMAQMD Thresholds (lb/day)	NO _x 65 lb/day	NO ₂ 65 lb/day	CO	PM ₁₀ 30 µg/m ³
Proposed Project				
Operational	374.71	392.73	3,274	3.36
Exceeds Threshold?	Yes	Yes	-	No

Source: EIP Associates. URBEMIS7G and ISC-ST3, January 2003.

area more pedestrian and bike friendly. As stated in the implementation goals, the Natomas area shall strive for a 35 percent reduction in all pollutants and all nonresidential development is required to reduce ROG by 50 percent when compared to the baseline conditions. It should be noted that the project site is located along a proposed light rail transit line and minor bus line which, when constructed and operating, will further encourage patrons and employees to use an alternative form of transportation.⁴ The light rail line is proposed to travel along Truxel Road while the bus line would travel along Gateway Boulevard. Many of the following mitigation measures would encourage people to use alternative forms of transportation, however, the effectiveness of these mitigation measures in reducing potential air emissions cannot be guaranteed. Although implementation of the following mitigation measures would reduce the magnitude of this impact, operational emissions would still exceed district thresholds, resulting in a *significant and unavoidable* impact.

Prior to project construction, the project applicant and city shall consult with the SMAQMD to ensure all applicable and feasible mitigation measures are being implemented, which shall include the following:

- a) *Bicycle lockers and/or bike racks shall be provided at all office buildings and retail centers.*
- b) *Provide an additional 20 percent of required Class I and Class II bicycle parking facilities.*
- c) *A display case or kiosk displaying transportation information in a prominent area accessible to employees and patrons.*
- d) *Parking lot shade shall be increased by 20 percent over city code requirements.*
- e) *Preferential parking for carpool/vanpools shall be provided to encourage shared ridership.*
- f) *The parking lot design shall include clearly marked and shaded pedestrian pathways between transit facilities and building entrances.*
- g) *The project applicant shall require building and/or property owners contracts with landscapers who operate equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use.*

⁴ City of Sacramento. North Natomas Community Plan. Adopted by City Council Resolution No. 94-259. May 3, 1996. Amended April 16, 1996. Pp 43.

- b) For all office development, promote telecommuting and implement an employee telecommuting program.
- i) Implement Clean Air Business Practices such as using low-emission delivery vehicles, contracting with alternative fuel waste hauling companies, etc.

Impact

7.3-4 CO emissions. (Project-specific)

As previously discussed, CO modeling was completed for the six worst intersections for the Proposed Project that were operating at an LOS F and which had the longest delays. All modeling was completed using information provided in the traffic analysis. As shown in Table 7.3-7, none of the intersections would result in a violation of the 1-hour or 8-hour standards for CO. It can be assumed that if the intersections with the most traffic congestion and longest delay times do not violate adopted CO standards, then those intersections that are operating at a similar level but with less traffic and shorter delay times also would not violate adopted CO standards. All CO modeling outputs are located in Appendix E. The highest CO level that is predicted to occur is 3.1 ppm for the 1-hour standard and 2.2 ppm for the 8-hour standard located 50 feet from the roadway at the intersection of Truxel Road and Gateway Park Boulevard. Because these levels are below the 20 ppm 1-hour standard and the 9 ppm 8-hour standard, a *less-than-significant impact* would occur.

Intersection Location	Existing Plus Project Conditions (PM Peak Hour)		Year 2025 Cumulative Plus Project Conditions (PM Peak Hour)	
	One Hour Avg.	Eight Hour Avg.	One Hour Avg.	Eight Hour Avg.
Northgate Blvd/ Del Paso Rd.	1.1	0.8	1.6	1.1
Truxel Rd/ Arena Blvd.	1.2	0.8	2.4	1.6
N. Market Blvd/National Dr.	0.8	0.5	1.0	0.7
N. Market Blvd/ N. Freeway Blvd.	1.3	0.9	1.1	0.7
Truxel Rd/Gateway Park Blvd.	3.1	2.2	3.4	2.3
Northgate Blvd./I-80 East Ramps	2.0	1.4	1.9	1.3

Note: All values are in parts per million (ppm).
State one-hour standard for carbon monoxide is 20 ppm. State eight-hour standard for carbon monoxide is 9 ppm.

Source: EIP Associates, January 2002.

Mitigation

7.3-4 CO emissions. (Project-specific)

As discussed above, implementation of the Proposed Project would not result in a violation of either the 1-hour or 8-hour CO standard. Therefore this impact is considered *less than significant* and no mitigation is required.

*Impact***7.3-5 Criteria air pollutants. (Cumulative)**

As discussed in the project description, the Proposed Project would require a General Plan Amendment, Community Plan Amendment and zoning changes to the existing site. Most notably, 101 acres of the site are currently designated for warehouses or similar uses, which produce considerably fewer air emissions because of the lower trip generation rate per 1,000 square feet. To accommodate the Proposed Project, the project site would be redesignated as commercial, office, or retail, all of which would result in more vehicle trips and higher emissions.

Furthermore, as noted previously in this section, the project area is located within Sacramento County that is currently designated as non-attainment for both State and federal ozone standards. The primary cause of ozone formation in the region is due to mobile vehicles that generate the pollutants ROG and NO_x, both of which are ozone precursors.

Assuming development within the Sacramento Valley Air Basin through the year 2025, development of the site would result in higher emissions than it would if it were built-out in accordance with existing General Plan, Community Plan and zoning designations, and because the region is designated as severe non-attainment for ozone, the Proposed Project would contribute considerably to a *significant cumulative impact* to air quality.

*Mitigation***7.3-5 Criteria air pollutants. (Cumulative)**

As discussed above, the Proposed Project would significantly impact cumulative air quality in the region. The following mitigation measures would reduce the magnitude of the impact; however, cumulative impacts to air quality would still exist and this impact would remain *significant and unavoidable*.

Implement Mitigation Measures 7.3-1 through 7.3-3.

*Impact***7.3-6 CO emissions. (Cumulative)**

As previously discussed, CO modeling was completed for the six worst intersections in the vicinity of the project site that were operating at an LOS F and which had the longest delays. All modeling was completed using information provided in the traffic analysis. As shown in Table 7.3-7, none of the intersections under cumulative conditions for the year 2025 would result in a violation of the 1-hour or 8-hour standards for CO. It can be safely assumed that if the intersections with the most traffic congestion and longest delay times do not violate adopted CO standards, then those intersections that are operating at a similar level but with less traffic and shorter delay times also would not violate adopted CO standards. All CO modeling outputs are located in Appendix E. The highest cumulative CO level that is predicted to occur is 3.4 ppm for the 1-hour standard and 2.3 ppm for the 8-hour standard located 50 feet from the roadway at the intersection of Truxel Road and Gateway Park Boulevard. Because these levels are below the 20 ppm 1-hour standard and the 9

ppm 8-hour standard, the impact is not considered cumulatively considerable and a *less-than-significant impact* would occur.

Mitigation

7.3-6 CO emissions. (Cumulative)

As discussed above, the Proposed Project would not result in a violation of either the 1-hour standard or the 8-hour standard for CO. Therefore, no mitigation is required and this impact would be *less than significant*.

Impact

7.3-7 Toxic air contaminant concentrations. (Cumulative)

As previously noted, the adopted health risk threshold for exposure to TAC is 10 in 1 million. This means that if a source results in more than 10 excess cancer cases per 1 million people, a significant impact may occur. The local air districts are responsible for regulating and monitoring TACs from stationary sources. Permits, and in some cases the implementation of Best Available Control Technology (BACT) or Maximum Available Control Technology (MACT), are required to ensure that stationary sources do not in and of themselves pose a significant risk to sensitive receptors. However, it is possible for stationary sources that individually do not exceed the adopted risk threshold of 10 in 1 million to cumulatively exceed the adopted risk threshold of 10 in 1 million when numerous facilities are operated simultaneously. At the present time, there are no known stationary sources within the vicinity of the project site that emit TACs. Implementation of the Proposed Project is not anticipated to result in the construction of stationary sources that emit TACs. In the event any facilities are constructed, they would be required to comply with the rules and regulations of local air districts to ensure that the health risk of 10 in 1 million is not exceeded.

In 1998 the CARB identified diesel particulate matter as a toxic air contaminant. Diesel particulate differs from other TACs in that it is generated primarily by mobile sources. The risk to sensitive receptors associated with exposure to this TAC depends upon a number of factors, including the wind direction, wind speed, concentration of the diesel particulate matter, the length of exposure, the existing concentration of diesel particulate matter in the air, and the distance from the source. The CARB currently estimates that the existing overall risk level associated with diesel particulate matter in California is estimated to be 540 excess cancer cases per 1 million people. Consequently, the existing risk level is higher than the adopted threshold of 10 in 1 million.

With implementation of the Proposed Project, diesel powered trucks would be used to deliver and distribute material goods associated with development of the site. Diesel trucks would also be used to transport goods to retail and commercial uses on the site. In addition to delivery trucks associated with the project, the project site is located adjacent to an existing freeway.

Although there are no residential homes within the project site, people would work within the project site for an average of 8 hours per day and 5 days per week. In some cases the work schedule may be slightly less or more. During the time the employee is working within the project site, they would be exposed to TACs associated with the delivery trucks and existing freeway traffic.

The CARB has produced a series of risk characterization scenarios as an Appendix to the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. The Scenario that most closely resembles the Proposed Project is known as the "Low Volume Freeway". In this Scenario, the freeway has three lanes in each direction and receptors were placed as close as 20 meters from the edge of the freeway. It was assumed that there was a flow of 2,000 trucks per day. Based on this Scenario, the health risk was estimated to be 200 excess cancer cases per million people based on 70 years of exposure.⁵ This estimated risk exceeds the threshold of 10 excess cancer cases per million people.

While this low volume freeway Scenario can be applied to the Proposed Project, it is important to note that there are differences between this Scenario and the project site. Most notably, although the Interstate-80 freeway is located immediately adjacent to the project site, most likely setback requirements and the design of the project would result in a distance that is greater than 20 meters between sensitive receptors (employees) and the existing freeway.

Traffic volumes along west bound I-80 that were recorded at the Northgate/I-80 intersection were estimated to be 126,000 vehicles per day. The number of vehicles estimated for the east bound lanes at the same intersection were estimated to be 104,000 vehicles per day.⁶

The CARB has not produced a risk scenario analyzing the potential impacts associated with the exposure of diesel particulate matter for trucks making deliveries that would be comparable to operation of the Proposed Project. However, the CARB has produced a risk scenario for idling school buses, which would most closely resemble the risk associated with diesel trucks delivering products to the project site. In this Scenario, the diesel particulate matter emissions from the loading and unloading of school children was quantified and the associated health risk was estimated. It was assumed that the buses were idling between 2 and 15 minutes while the children were loading and unloading. The risk associated with this Scenario was estimated to be 90 excess cancer cases per million people based on 70 years of exposure. This estimated risk Scenario also exceeds the threshold of 10 excess cancer cases per million people.

Furthermore, it should be noted that the project site is located adjacent to an existing light industrial area. This area currently delivers and distributes goods via diesel trucks on a daily basis. The same is also true of the existing Natomas Market Place, which also receives deliveries from diesel powered trucks on a daily basis.

Diesel particulate matter is a unique TAC in that it is generated by mobile sources, which are currently unregulated by local air districts. However, mobile source emissions, including diesel particulate matter are regulated by the CARB, a State entity. The CARB has derived a number of strategies for reducing diesel particulate matter. These strategies include retro-fitting existing engines by installing a diesel particulate filter, using alternative fuels, and stricter emission control standards for all new engines.

5 California Air Resources Board. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. Stationary Source Division, Mobile Source Control Division. October 2000, Appendix VII.

6 California Department of Transportation. www.dot.ca.gov/hg/traffops/saferesr/terafdata/1999. website accessed December 11, 2002.

Although the risk scenarios presented here for comparison represent a worst-case scenario, since they assume an individual will receive continuous maximum exposure to the TAC for 70 years (the estimated lifetime of an individual), and although the Proposed Project's individual contribution to diesel particulate matter within the area would be minimal, development of the Proposed Project in combination with other development in the region could still expose employees to a substantial risk that is greater than the adopted 10 in 1 million threshold. Therefore, this would be a *significant cumulative impact*.

Mitigation

7.3-7 Toxic air contaminant concentrations. (Cumulative)

Under the Proposed Project, the trucks used for delivering materials to the project site are not owned or operated by the project applicant, and therefore retro-fitting existing engines with diesel particulate filters, requiring the use of alternative fuels, and/or purchasing new trucks that meet the new, stricter diesel particulate matter emission standards are not feasible mitigation measures. Any mitigation to reduce the magnitude of this impact must be implemented by the CARB and would occur over time as stricter emissions requirements are adopted and implemented.

Because there are no feasible mitigation measures available to reduce the magnitude of this impact, it would remain *significant and unavoidable* for the Proposed Project.

7.4 Noise



7.4 NOISE

INTRODUCTION

This section discusses the existing noise environment in the project vicinity and the potential of the Proposed Project and project alternatives to significantly increase noise levels due to project construction, traffic, and operation. References used for this section include the City of Sacramento General Plan Noise Element, City Noise Ordinance, and the Federal Highway Administration Highway Traffic Noise Prediction Model. Traffic inputs for the noise prediction model were provided by Dowling Associates. No comments regarding noise were received in response to the Notice of Preparation (July 2000 or September 2002). Scoping meeting comments requested that the EIR specify mitigation measures for any noise impacts. As discussed in the Initial Study (see Appendix B of Volume II of the Promenade at Natomas/Sacramento Auto Loop Project DEIR) the Proposed Project would not result in exposure of persons to excessive groundborne vibration and noise, or excessive noise levels from a public use airport or private airstrip; therefore, these topics are not addressed in this section.

For the purpose of the noise analysis, it is assumed that because the revised project includes a less intense development project than what was evaluated for Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR, impacts associated with the revised project would be less severe. The noise analysis assumes the same impacts and mitigation measures as those identified for Scenario B in the Promenade at Natomas/Sacramento Auto Loop DEIR.

ENVIRONMENTAL SETTING

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). A list of commonly used acoustical terms is included in Table 7.4-1.

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

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.

of loudness is relatively predictable, and can be approximated by the A-weighting 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.

Existing Land Uses in the Project Vicinity

The project site is currently vacant and undeveloped. It is bordered to the north by light industrial uses and office buildings. It is bordered to the south by Interstate 80, to the east by office buildings, and to the west by vacant land. Further west is the Natomas Marketplace retail shopping center.

The only identified noise-sensitive land uses in the general project vicinity consist of the Natomas Crossing single-family residential development on the west side of Truxel Road at Natomas Crossing Road, and existing and proposed multi-family residential developments to the northwest at the intersection of Truxel Road and Stadium Boulevard. While these uses are not contiguous to the project site, they could be affected by increased traffic noise resulting from the project.

Existing General Ambient Noise Environment

The existing ambient noise environment in the immediate project vicinity is defined almost exclusively by local traffic on Interstate 80, and to a lesser extent by Truxel Road and Gateway Park Boulevard. Noise generated by loading dock activities at the nearby Raley's distribution center and Natomas Marketplace commercial center is highly localized at the individual loading docks and, relative to existing traffic noise, does not contribute significantly to the overall ambient noise environment. As a result, the discussion of ambient noise levels in the project vicinity focuses on traffic noise.

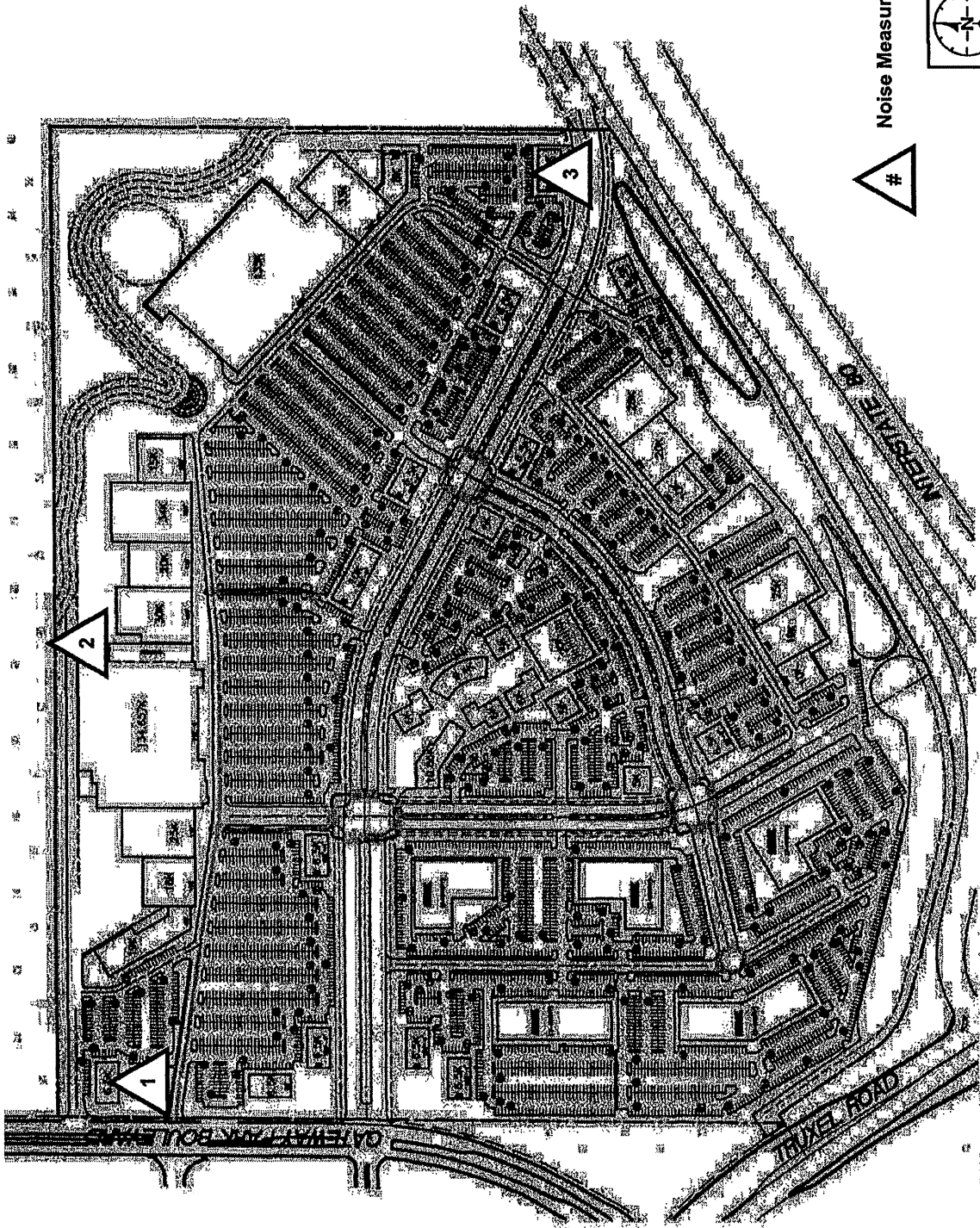
To generally quantify the existing ambient noise environment in the project vicinity, a short-term ambient noise level measurement survey was conducted at three locations on the project site on the afternoon of March 30, 2001. The noise measurement locations are shown on Figure 7.4-1.

A Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter was used for the noise level measurement survey. The meter was 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 S1.4).

The noise level measurement survey results are provided below in Table 7.4-2. The ambient noise monitoring survey revealed that ambient noise levels in the immediate project vicinity are elevated, as would be expected in such close proximity to a major roadway (Interstate 80).

AMBIENT NOISE MONITORING RESULTS PROJECT VICINITY - MARCH 30, 2001				
Location	L ₁₀ (dB)	L ₅₀ (dB)	L ₉₀ (dB)	Noise Source
1	Northwest corner of project site	60	86	Truck & bus traffic
2	North central portion of project site	58	76	Distant traffic & construction
3	Southeast portion of project site	65	73	Interstate 80

Source: Bollard & Brennan, Inc., 2002.
Noise measurement locations are shown on Figure 7.4-1.



Source: NADEL Architects, Inc.

FIGURE 7.4-1
Noise Reading Locations



10483-01

Existing Traffic Noise Environment

To predict existing and future 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 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. The FHWA model was developed to predict hourly Leq values for free-flowing traffic conditions. Because the day/night distribution of traffic for this area was assumed to be approximately 85 percent for day and 15 percent for night, traffic noise levels predicted by the FHWA Model in terms of Leq are approximately equivalent to Ldn.

Traffic volumes were obtained from the Traffic Impact Study prepared for the project by Dowling Associates, Inc. (January, 2002). The data is provided in that report in the form of segment volumes. Truck usage on the local area roadways were estimated from field observations.

Tables 7.4-3 and 7.4-4 show the predicted existing weekday and Saturday traffic noise levels, respectively, in terms of the peak hour noise levels and Ldn at a reference distance of 100 feet from the centerlines of the existing project-area roadways for existing "baseline" conditions. Those tables also show the distances to existing traffic noise contours. The baseline conditions were used to assess pre-project noise levels since it represents existing plus currently approved project conditions. The extent by which existing land uses in the project area vicinity are affected by existing traffic noise depends on their respective proximity to the roadways and their individual sensitivity to noise. A complete listing of the FHWA Model input data is contained in Appendices F and G.

REGULATORY CONTEXT

Federal and State

There are no federal or State noise regulations that would be directly applicable to the Proposed Project.

Local

City of Sacramento Noise Element Criteria

The City of Sacramento Noise Element establishes land use compatibility criteria for a variety of land uses in terms of Day/Night Average Levels (Ldn). The uses with the highest degree of sensitivity have the lowest corresponding land use compatibility criteria with respect to noise. Specifically, residential uses are considered acceptable in exterior noise environments up to 60 dB Ldn without noise mitigation, and as high as 70 dB Ldn with mitigation. Commercial and industrial uses are considered acceptable in exterior noise environments up to 65 dB Ldn without noise mitigation, and as high as 80 dB Ldn with mitigation.

Because the exterior areas of the land uses proposed within the project site are not particularly sensitive to noise, the emphasis of the noise impact analysis for these uses would be on the interior spaces of office or commercial uses at which an acceptable noise environment would be required to conduct business.

TABLE 7.4-3

**BASELINE WEEKDAY TRAFFIC VOLUMES, NOISE LEVELS,
AND DISTANCES TO CONTOURS
PROMENADE AT NATOMAS - SACRAMENTO, CALIFORNIA**

Accession	Roadway	Segment	Peak Hr. Volume	Eq. 4.14n @ 100 Feet	Distance to Contour (feet)		
					70 dB	65 dB	60 dB
1	Del Paso/Gateway	South	10	44	2	4	9
		North	304	59	19	41	89
		West	1373	66	52	113	242
		East	1201	65	48	103	222
2	Del Paso/National	South	311	59	19	42	90
		North	0	0	0	0	0
		West	981	67	42	90	194
		East	1182	65	47	102	219
3	Northgate/Del Paso	South	1384	66	53	113	244
		North	94	54	9	19	41
		West	1029	65	43	93	200
		East	1433	66	54	116	249
4	Truxel/Arena	South	1248	65	49	106	227
		North	1159	65	47	101	217
		West	231	58	16	34	74
		East	292	59	19	40	86
5	Arena/Gateway Park	South	826	64	37	80	173
		North	81	54	8	17	37
		West	253	58	17	36	79
		East	1038	65	43	93	201
6	N. Market/Hewlett	South	346	60	21	45	97
		North	69	53	7	15	33
		West	1033	65	43	93	201
		East	808	64	37	79	170
7	N. Market/National	South	514	62	27	58	126
		North	353	60	21	45	98
		West	839	64	38	81	175
		East	954	64	41	88	190
8	N. Market/N. Freeway	South	350	60	21	45	97
		North	0	0	0	0	0
		West	1275	65	50	107	231
		East	1551	66	57	122	263
9	N. Market/ Northgate	South	3371	70	95	205	441
		North	2030	68	68	146	315
		West	2035	68	68	146	315
		East	14	46	2	5	11
10	Gateway Park/ Raley's	South	904	64	40	85	183
		North	859	64	38	82	177
		West	65	53	7	15	32
		East	0	0	0	0	0
11	Truxel/Gateway Park	South	3381	70	95	205	442
		North	1394	66	53	114	245
		West	2266	68	73	157	339
		East	845	64	38	81	175
12	Halcraft/N. Freeway	South	0	0	0	0	0
		North	49	51	6	12	26
		West	0	0	0	0	0
		East	49	51	6	12	26

TABLE 7.4-3

**BASELINE WEEKDAY TRAFFIC VOLUMES, NOISE LEVELS,
AND DISTANCES TO CONTOURS
PROMENADE AT NATOMAS - SACRAMENTO, CALIFORNIA**

Location	Direction	Volume	L ₁₀ (dBA)	Distance to Contour (feet)			
				70 dBA	65 dBA	60 dBA	
13	Truxel/I-80 West Ramps	South	2570	69	79	171	368
		North	2973	69	87	188	406
		West	755	63	35	76	163
		East	966	64	41	89	192
14	Truxel/I-80 East Ramps	South	2600	69	80	172	371
		North	2605	69	80	172	372
		West	1308	66	51	109	235
		East	391	60	23	49	105
15	Northgate/I-80 West	South	3034	69	89	191	411
		North	3582	70	99	213	459
		West	873	64	39	83	179
		East	857	64	38	82	177
16	Northgate/I-80 East	South	2489	68	78	167	360
		North	3031	69	89	191	411
		West	1570	66	57	123	265
		East	464	61	25	55	118
17	Truxel/San Juan	South	2371	68	75	162	349
		North	2812	69	84	181	391
		West	1383	66	52	113	244
		East	2030	68	68	146	315
18	Northgate/San Juan	South	2293	68	74	158	341
		North	2264	68	73	157	338
		West	1552	66	57	122	263
		East	1311	66	51	109	235

Notes:

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

Source: FHWA-RD-77-108 with inputs from Dowling Associates and Bollard & Brennan, Inc. 2002.

TABLE 7.4-4

**BASELINE SATURDAY TRAFFIC VOLUMES,
NOISE LEVELS AND DISTANCES TO CONTOURS
PROMENADE AT NATOMAS - SACRAMENTO, CALIFORNIA**

Site Number	Roadway	Segment	Peak Hr. Volume	Eq. 1.1a @ 100 Feet	Distance to Contours (ft)		
					70 dB	65 dB	60 dB
1	Del Paso/Gateway	South	0	0	0	0	0
		North	209	58	15	32	69
		West	489	61	26	57	122
		East	366	60	22	47	100
2	Del Paso/National	South	71	53	7	16	34
		North	0	0	0	0	0
		West	387	60	22	48	104
		East	434	61	24	52	112
3	Northgate/Del Paso	South	601	62	30	65	140
		North	37	50	5	10	22
		West	482	61	26	56	121
		East	586	62	30	64	137
4	Truxel/Arena	South	764	63	35	76	164
		North	760	63	35	76	163
		West	20	47	3	7	14
		East	66	53	7	15	32
5	Arena/Gateway Park	South	174	57	13	28	61
		North	11	45	2	5	10
		West	67	53	7	15	32
		East	218	58	15	33	71
6	N. Market/Hewlett	South	39	50	5	10	23
		North	17	47	3	6	13
		West	214	58	15	33	70
		East	190	57	14	30	65
7	N. Market/National	South	43	51	5	11	24
		North	74	53	7	16	35
		West	187	57	14	30	64
		East	158	56	12	27	57
8	N. Market/N. Freeway	South	68	53	7	15	33
		North	0	0	0	0	0
		West	262	59	17	37	80
		East	306	59	19	41	89
9	N. Market/ Northgate	South	962	64	41	89	191
		North	780	63	36	77	166
		West	357	60	21	46	99
		East	13	46	2	5	11
10	Gateway Park/ Raley's	South	208	58	15	32	69
		North	175	57	13	28	61
		West	39	50	5	10	23
		East	0	0	0	0	0
11	Truxel/Gateway Park	South	3085	69	90	193	416
		North	911	64	40	86	184
		West	2846	69	85	183	394
		East	236	58	16	35	75
12	Halcraft/N. Freeway	South	0	0	0	0	0

TABLE 7.4-4

**BASELINE SATURDAY TRAFFIC VOLUMES,
NOISE LEVELS AND DISTANCES TO CONTOURS
PROMENADE AT NATOMAS - SACRAMENTO, CALIFORNIA**

Project	Roadway	Direction	Peak Hour Volume	Eq./Ldn @ 100 Feet	Distance to Contour (Feet)		
					5 dBS	45 dBS	60 dBS
		North	4	40	1	2	5
		West	2	37	1	1	3
		East	6	42	1	3	6
13	Truxel/I-80 West Ramps	South	2451	68	77	166	357
		North	3081	69	90	193	416
		West	544	62	28	61	131
		East	1064	65	44	95	205
14	Truxel/I-80 East Ramps	South	2143	68	70	151	326
		North	2474	68	77	167	359
		West	953	64	41	88	190
		East	312	59	19	42	90
15	Northgate/I-80 West	South	1410	66	53	115	247
		North	1535	66	56	121	261
		West	353	60	21	45	98
		East	578	62	29	63	136
16	Northgate/I-80 East	South	1439	66	54	116	250
		North	1405	66	53	114	246
		West	695	63	33	71	154
		East	355	60	21	46	98
17	Truxel/San Juan	South	1760	67	62	133	286
		North	2192	68	71	154	331
		West	1011	64	43	92	198
		East	1457	66	54	117	252
18	Northgate/San Juan	South	1795	67	62	135	290
		North	1641	67	59	127	273
		West	1170	65	47	101	218
		East	848	64	38	82	176

Notes:

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

Source: FHWA-RD-77-108 with inputs from Dowling Associates and Bollard & Brennan, Inc. 2002.

In the assessment of noise impacts at off-site existing noise-sensitive areas, the Noise Assessment Report Guidelines contained in the Noise Element states that "Mitigation measures should be considered if the project would increase the Ldn at a noise-sensitive location by more than 4 dB or cause the overall level to exceed that considered normally acceptable for the land use category."

City of Sacramento Noise Ordinance Criteria

Section 66.02.201 of the Sacramento City Code (Noise Control) states that it is unlawful for any person at any location within the City to create any noise which causes the noise levels on the affected residential property to exceed the noise standards shown in Table 7.4-5.

TABLE 7.4-5

**SACRAMENTO CITY NOISE ORDINANCE STANDARDS
APPLICABLE AT EXTERIOR SPACES OF RESIDENTIAL USES**

Cumulative Duration of Intensive Sound	Noise Metric	Daytime
Cumulative period of 30 minutes per hour	L ₅₀	55
Cumulative period of 15 minutes per hour	L ₂₅	60
Cumulative period of 5 minutes per hour	L ₀₈	65
Cumulative period of 1 minute per hour	L ₀₂	70
Level not to be exceeded for any time during hour	L _{max}	75

Notes:

1. Daytime is defined as 7 a.m. to 10 p.m.

2. Each of the noise limits specified above shall be reduced by 5 dBA for impulsive or simple tone noises or for noises consisting of speech or music.

3. If the existing ambient noise levels exceed that permitted in the first four noise-limit categories, the allowable limit shall be increased in 5 dB increments to encompass the ambient.

Source: City of Sacramento Noise Ordinance.

IMPACTS AND MITIGATION

Method of Analysis

The potentially significant noise-producing components of this project at existing and proposed noise-sensitive land uses in the general project vicinity are project-related construction, increased traffic noise on the local roadway network, and commercial loading dock related activities. Therefore, this analysis focuses on those noise sources.

Traffic Noise Impact Assessment Methodology

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. The traffic noise levels were predicted using the same modeling methodology described above, with the baseline inputs contained in Appendix F and the cumulative conditions inputs contained in Appendix G.

Table 7.4-6 shows the predicted traffic noise level increases on the local roadway network for existing weekday and Saturday conditions, respectively. The table shows the predicted traffic noise level increases on the local roadway network for cumulative weekday and Saturday conditions, respectively. The tables are provided in terms of L_{eq}/L_{dn} at a standard distance of 100 feet from the centerlines of the project-area roadways.

Construction Noise Impact Assessment Methodology

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 7.4-7, ranging from approximately 85 up to approximately 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.

TABLE 7.4-6

PROPOSED PROJECT PREDICTED TRAFFIC NOISE LEVELS

Intersection	Roadways	Segment	Existing 7/10/11	Change in Traffic Noise Level Relative to Baseline (dB/day/eq)			
				Weekly	Saturday	Weekly	Saturday
1	Del Paso/Gateway	South	44	13	N/A	13	4
		North	59	1	2	1	1
		West	66	0	0	0	0
		East	65	0	1	0	0
2	Del Paso/National	South	59	0	0	0	3
		North	0	0	0	0	3
		West	64	0	1	0	0
		East	65	0	1	0	0
3	Northgate/Del Paso	South	66	0	1	0	0
		North	54	0	0	0	0
		West	65	0	1	0	0
		East	66	0	1	0	1
4	Truxel/Arena	South	65	1	0	1	0
		North	65	2	3	2	1
		West	58	2	9	2	1
		East	59	5	12	5	5
5	Arena/Gateway Park	South	64	3	9	3	3
		North	53	8	14	8	3
		West	58	6	12	6	3
		East	65	1	1	1	0
6	N. Market/Hewlett	South	60	0	0	0	0
		North	53	0	0	0	0
		West	65	1	1	1	0
		East	63	1	1	1	0
7	N. Market/National	South	62	0	0	0	5
		North	60	0	0	0	2
		West	64	1	1	1	0
		East	64	1	1	1	0
8	N. Market/N. Freeway	South	60	4	9	4	12
		North	0	0	0	0	N/A
		West	65	1	1	1	0
		East	66	2	4	2	2
9	N. Market/Northgate	South	70	1	1	1	1
		North	67	0	1	0	0
		West	67	1	4	1	2
		East	46	0	0	0	0
10	Gateway Park/Raley's	South	64	3	8	3	4
		North	64	3	9	3	4
		West	53	0	0	0	N/A
		East	0	0	0	0	N/A
11	Truxel/Gateway Park	South	70	2	3	2	1
		North	66	1	2	1	0
		West	68	0	0	0	0

TABLE 7.4-6

PROPOSED PROJECT PREDICTED TRAFFIC NOISE LEVELS

Intersection	Roadways	Segment	Baseline Leq/15m @ 100 ft	Change in Traffic Noise Levels Relative to Baseline, dB (Day/Evening)			
				Weekday		Saturday	
				Weekday	Saturday	Weekday	Saturday
12	Halcraft/N. Freeway	East	64	6	11	6	5
		South	0	0	0	0	N/A
		North	51	0	0	0	3
		West	0	N/A	23	N/A	4
		East	51	10	19	10	4
13	Truxel/I-80 West Ramps	South	68	2	2	2	1
		North	69	2	3	2	1
		West	63	3	3	3	1
		East	64	1	1	1	0
14	Truxel/I-80 East Ramps	South	69	1	1	1	1
		North	69	2	2	2	1
		West	66	2	3	2	1
		East	60	0	0	0	0
15	Northgate/I-80 West Ramps	South	69	1	1	1	1
		North	70	1	1	1	1
		West	64	0	0	0	0
		East	64	1	1	1	2
16	Northgate/I-80 East Ramps	South	68	0	0	0	1
		North	69	1	1	1	1
		West	66	1	1	1	1
		East	61	0	0	0	3
17	Truxel/San Juan	South	68	0	1	0	0
		North	69	1	1	1	1
		West	66	0	1	0	0
		East	67	1	1	1	1
18	Northgate/San Juan	South	68	0	0	0	0
		North	68	0	0	0	0
		West	66	0	0	0	0
		East	66	0	0	0	0

Source: FHWA-RD-77-108 with inputs from Dowling Associates and Bollard & Brennan, Inc., 2002.

TABLE 7.4-7

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.

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.

The 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.

Loading Dock Noise Impact Assessment Methodology

Due to the elevated noise emissions of heavy trucks and the common practice of using loading docks during late night or early morning hours, adverse public reaction to loading dock usage is not uncommon. This is especially true if heavy trucks idle during unloading or if refrigeration trucks are parked in close proximity to residential boundaries.

Average noise levels for single idling trucks generally range from 60 to 65 dB L_{eq} at distances of 100 feet, and maximum noise levels associated with heavy truck passages range from 70 to 75 dB L_{max} at distances of 100 feet. Maximum noise levels generated by passages of medium duty delivery trucks generally range from 55 to 65 dB at a distance of 100 feet, depending on whether or not the driver is accelerating.

Standards of Significance

Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. For example, noise impacts are identified at existing noise-sensitive areas if the noise level increases resulting from the project exceed the 4 dB significance threshold, as discussed previously in the Regulatory Context discussion of this section. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local planning criteria or ordinances, or substantially increase noise levels at noise-sensitive land uses.

For purposes of this EIR, an impact is considered significant if the Proposed Project or Alternatives would:

- Expose existing noise-sensitive land uses to levels in excess of the Table 7.4-5 standards for commercial loading dock activities; or
- Expose existing noise-sensitive land uses to a significant noise level increase, defined as 4 dB.

Impacts and Mitigation Measures

Impact

7.4-1 Construction Noise. (Project-specific)

Activities associated with construction within the project area would result in elevated noise levels within the project area, with maximum noise levels as shown in Table 7.4-7.

Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature and would occur during normal daytime working hours. Construction activities would be required to adhere to the requirements of the City of Sacramento Noise Ordinance with respect to hours of operation, muffling of internal combustion engines, and other factors that affect construction noise generation. The nearest sensitive receptors are new residences and are a distance away from the site to the northwest. Because there are no sensitive receptors in the immediate project vicinity that would be adversely affected by construction noise, this impact is considered *less than significant*.

Mitigation

7.4-1 Construction Noise. (Project-specific)

No mitigation would be required for the Proposed Project.

Impact

7.4-2 Traffic Noise. (Project-specific)

The Proposed Project would generate increased traffic on the existing roadway network. Pursuant to the City of Sacramento Noise Element, a substantial increase in traffic noise levels is defined as a 4 dB increase.

Under the Proposed Project, traffic noise level increases are predicted to be 4 dB or more on 7 roadway segments on weekdays and 13 roadway segments on weekends, as shown in Table 7.4-6. Noise-sensitive land uses include new multi-family residential uses in the vicinity of Truxel and Arena. The Proposed Project includes a 5 dB increase on the east segment of the Truxel/Arena intersection on weekdays and a 12 dB and 9 dB increase on the east and west segments, respectively on weekends. Therefore, this is considered a *significant impact*.

Mitigation

7.4-2 Traffic Noise. (Project-specific)

Increased traffic generated by the development of the Proposed Project will cause traffic noise levels to increase on the local roadway network. The extent by which existing land uses are affected by these increases will depend on their proximity to the roadways in question as well as their individual sensitivity to noise.

The reason no noise mitigation measures are available for this impact is that such mitigation would require modification to either the source of traffic noise, the transmission path between the road and the receivers, or the receiver. Modification to the noise source would require the quieting of individual vehicles, which is preempted from local control by the State Motor Vehicle Code. While noise-reducing pavement materials have been shown to reduce traffic noise levels in some areas, this

measure would require re-paving of the impacted roadway segments and still would not provide sufficient noise reduction to reduce this impact to a level of insignificance.

Treatment of the path of sound between the roadway and receiver would require the construction of noise barriers at impacted receptors within the plan area. New single-family residential uses located near the project site include sound walls; however, new multi-family apartments do not. Irrespective of the cost associated with such mitigation, barriers could not be constructed at all locations or would not be effective at all locations due to engineering and safety constraints, as well as topographic and vehicular access constraints. In addition, the relative change in noise levels with or without sound walls would be similar. For example, if the project would increase traffic noise levels by 6 dB along a roadway segment with residences that have sound walls, those residences would have lower overall noise levels in their backyards, but the project-related traffic noise increase, relative to those lower baseline levels, would still be 6 dB, which is significant.

Finally, treatment of the receptor would essentially consist of retrofitting the buildings of noise-sensitive receptors to provide additional attenuation of traffic noise by the amount which development of the project or alternatives would cause traffic noise to increase. The costs and other constraints associated with such retrofitting would render this option infeasible. Therefore, this impact is considered a *significant and unavoidable* impact for the Proposed Project.

Impact

7.4-3 Commercial Loading Dock and Related Noise Levels. (Project-specific)

The project site is not adjacent to existing or planned residential uses. Noise-producing aspects of commercial loading docks and associated commercial noise sources on the project site are predicted to produce noise levels of less than 35 dB Leq and 50 dB L_{max} at the nearest land uses. Pursuant to the City's Noise Ordinance criteria shown in Table 7.4-4, noise associated with commercial loading docks exceeding 50 dB Leq and 70 dB L_{max} would be considered significant during daytime hours. During nighttime hours, the City noise standards are 10 dB more restrictive. Because of the considerable distance between the on-site project-related noise sources and the nearest residential uses, noise generated by on-site noise sources are not predicted to exceed the City's Noise Ordinance standards. Therefore, this is considered a *less-than-significant impact*.

Mitigation

7.4-3 Commercial Loading Dock and Related Noise Levels. (Project-specific)

No mitigation would be required for the Proposed Project.

Impact

7.4-4 Traffic Noise. (Cumulative)

The Proposed Project would generate increased traffic on the existing roadway network. Under the Proposed Project, traffic noise level increases are predicted to be 4 dB or more on seven roadway segments on weekdays and nine roadway segments on weekends, as indicated by Table 7.4-6. There would be a 5 dB increase on the east segment of the Truxel/Arena intersection during weekdays and

weekends. Because there are noise-sensitive land uses in the vicinity of Truxel and Arena, this is considered a *significant impact*.

Mitigation

7.4-4 Traffic Noise. (Cumulative)

Increased traffic generated by the development of the Proposed Project will cause traffic noise levels to increase on the local roadway network. The extent by which existing land uses are affected by these increases will depend on their proximity to the roadways in question as well as their individual sensitivity to noise.

Please see the discussion under Impact 7.4-2 regarding why no noise mitigation measures are available for this impact. This impact is considered a *significant and unavoidable* impact for the Proposed Project.

7.5 Public Services and Utilities

7.5 PUBLIC SERVICES AND UTILITIES

INTRODUCTION

This section of the EIR describes existing public services and utilities available in the vicinity of the Promenade at Natomas project in North Natomas, evaluates the effects of project development on those services, and suggests means of maintaining service at existing levels. The services evaluated in this section include the following:

- Police Protection;
- Fire Protection;
- Water Supply and Treatment;
- Wastewater Treatment and Conveyance;
- Energy; and
- Solid Waste Disposal.

The analysis in this EIR will focus on the ability of the existing service providers to provide services to the project while maintaining existing service standards. Impacts to schools and parks were addressed in the Initial Study for this project (see Appendix B) and determined to be less than significant so these topics will not be further evaluated in this EIR. Comments received in response to the NOP (July 2000 and September 2002) did not pertain to Public Services or Utilities.

POLICE SERVICES

ENVIRONMENTAL SETTING

The Proposed Project would be served by the City of Sacramento Police Department (SPD). The SPD offers a variety of police protection services, including Home Alert, Business Alert, and Protection Plus Program for businesses. Television and radio are also used to inform residents of crime prevention measures. In addition, the SPD participates in the City's subdivision review process, coordinating with the Public Works Department in reviewing street design, lighting, and traffic controls.

The SPD currently employs 702 sworn and 379 non-sworn officers,¹ at a ratio of approximately 1.2 sworn staff per 1,000 population.² The SPD recommends a ratio of 2 officers per 1,000 population, based on federal statistics,³ and the North Natomas Community Plan contains a service standard of

1 Rhonda Mitchell, Personnel Transaction Coordinator, Sacramento Police Department, personal communication, January 4, 2002.

2 Rick Jones, Captain, Sacramento Police Department, personal communication, February 15, 2002.

3 *Draft Environmental Impact Report, City of Sacramento General Plan Update*, City of Sacramento, March 1987.

1.6 officers per 1,000 population. The Sacramento City Council has recently approved the addition of a number of new police officers to the SPD, but this has yet to take effect.⁴

The North Natomas area, including the Proposed Project site, is served by the Sacramento Police Department's North Station, located at 3550 Marysville Blvd. The North Station serves the portion of the City that covers the North Natomas area to Ethan Way in the Arden area. Response time to the project site is approximately seven minutes from this station. The North Station maintains approximately nine sworn officers and two non-sworn officers to serve the North Natomas area (Sector One) in a given week. In addition, four Problem Oriented Police (POP) Officers are assigned to Sector One. These POP Officers work alongside 10 POP Officers who focus in Sector Two (the remaining north area), and provide assistance to their counterparts in different sectors when necessary. The North Station includes an 18-officer SWAT team, a Domestic Violence Unit, and approximately 12 detectives in addition to the staff listed above. A total of approximately 90 officers serve the entire north area. This reflects the approximately 1.2 to 1,000 citywide officer/population ratio.⁵ The rapid growth in the North Natomas area has already put some stress on service capacity of the local police agency. The rapid growth could link to a potential increase in robberies, so more officers are already needed.⁶

REGULATORY CONTEXT

State and Federal

There are no specific federal or State regulations pertaining to law enforcement applicable to this project and relevant under CEQA.

Local

City of Sacramento General Plan

The following goals and policies from the City of Sacramento General Plan are applicable to the Proposed Project:

Goal A: Provide the highest level of police service to protect the City residents and businesses.

Policies:

1. Continue Police Department participation in the review of subdivision proposals and in assisting the Public Works Department with traffic matters.
2. Maintain communication with residents and businesses in order to learn about developing crime problems and to educate people on crime prevention measures and programs.

⁴ Rick Jones, Captain, Sacramento Police Department, personal communication, February 15, 2002.

⁵ Rick Jones, Captain, Sacramento Police Department, personal communication, February 15, 2002.

⁶ Kurt McCray, Crime Prevention Specialist, Sacramento Police Department, personal communication, January 4, 2002.

North Natomas Community Plan

The following guiding and implementing policies from the NNCP are applicable to the Proposed Project:

Guiding Policies:

- A. Provide excellent fire and police protection to the residents, workers, and visitors to the North Natomas Community.
- B. Design the physical form of the community to require less police protection.
- C. Promote community services and programs to decrease the need for police protection.

Implementing Policies:

Police: The plan envisions one 5-acre police substation to be located in the Town Center. Locating the police station near the regional park enhances the sense of safety in the park. Prior to development, the City Police Department must verify adequate police protection facilities and maintain a police protection service standard of 1.60 police officers per 1,000 residents and 1.0 non-sworn personnel for every 1.60 police officers added either through a funded program or as a condition of approval for the project. The Police Department requires a police substation to be provided prior to 60 percent of the land being developed within the North and South Natomas areas. The station provides service to the subregion of North and South Natomas and is able and projected to accommodate 220 officers and non-sworn personnel.

IMPACTS AND MITIGATION

Method of Analysis

The City of Sacramento Police Department was contacted for up-to-date background information related to current levels of service. Because the Proposed Project is located within the NNCP area, the NNCP service standard of 1.6 sworn officers and 1.0 non-sworn staff per 1,000 population were used to determine need for additional officers. This information, along with projected project demand and relevant policy guidelines, were used to determine the project impact.

Standards of Significance

For the purposes of this EIR, an impact is considered significant if implementation of the Proposed Project or alternatives would:

- Create an increased demand for police protection that would substantially interfere with the ability of the police department to provide adequate service.

Impacts and Mitigation Measures

Impact

7.5-1 Increased demand for police protection services. (Project-specific)

The Proposed Project would result in an increase of approximately 4,184 employees, (less than what was analyzed in the prior EIR) but would not result in a notable population increase in the North Natomas area, as the project does not include a residential component (for a further discussion of

population increases, see Chapter 6, Population, Employment, and Housing). The Sacramento Police Department would provide service to the project from the North Station. No new officers would be necessary in order to maintain the NNCP's 1.6/1,000 officer-to-population ratio because there would be no increase in population. In addition, increases in call volume associated with the project would not significantly increase response times.⁷ This is considered a *less-than-significant impact*.

Mitigation

7.5-1 Increased demand for police protection services. (Project-specific)

No Mitigation Measures would be required for the Proposed Project.

Impact

7.5-2 Increased demand for police protection services. (Cumulative)

Development in the North Natomas area and its associated effects on law enforcement services were taken into account in the North Natomas Community Plan. Rapid development in the North Natomas area will require that police services be augmented in order to accommodate increasing demand from the area's growing population. The Proposed Project would not cause a population increase in the North Natomas area, and therefore would not significantly contribute to the need for additional police services in the area. This impact would be considered cumulatively *less than significant*.

Mitigation

7.5-2 Increased demand for police protection services. (Cumulative)

No Mitigation Measures would be required for the Proposed Project.

FIRE PROTECTION SERVICES

ENVIRONMENTAL SETTING

The City of Sacramento Fire Department (SFD) is an "all service" organization, serving the City of Sacramento and its three contract areas of Natomas, Fruitridge, and Pacific Fire Districts. The SFD has established an automatic aid agreement with all County fire districts and is dispatched through Sacramento Regional Fire Emergency Communication Center (SRFECC), a Joint Powers Authority (JPA). The SFD has received an Insurance Service Organization (ISO) rating of 2, with 1 being the best rating. Fire Prevention programs include review and inspection of all new construction, fire safety education, Company Inspection Service (CIS) business inspection program, and work with County Health in identifying hazardous materials.⁸

⁷ Jim Hyde, City of Sacramento Police Department, personal communication, July 17, 2002.

⁸ Greg Hoeger, City of Sacramento, written communication to Grace Hovey, City of Sacramento, November 5, 2002.

The fire station nearest the project is Station 18 located at 746 North Market between Northgate Boulevard and National Drive. This station has an engine with four personnel and a paramedic ambulance with two personnel assigned to it. Projected response times are calculated based upon a five minute response. Analysis of the development in North Natomas has shown an increase in volume of calls and an increase in response time. Additional coverage is provided by Station 15 located at 1591 Newborough (intersection of Newborough and Truxel Road). This station is equipped with an engine and grass rig and staffed by four personnel. All personnel are trained as first responders to hazardous materials incidents with Truck 20, located at 300 Arden Way (intersection of Arden Way and Del Paso Boulevard), being the closest company that has the ability to enter a hazardous material area.⁹

REGULATORY CONTEXT

Federal

There are no federal regulations pertaining to fire protection applicable to this project and relevant under CEQA.

State

California Public Resources Code 4290

California Public Resources Code 4290 sets forth guidelines regarding minimum fire safety standards that apply to the perimeters and access to all residential, commercial, and industrial building construction within state responsibility areas (SRAs) approved after January 1, 1991. This policy requires regulations including: road standards for fire equipment access; standards for signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fuel breaks and greenbelts. These regulations do not supersede local regulations that exceed or are equal to minimum state regulations.¹⁰

Local

City of Sacramento General Plan

The following goals and policies from the City of Sacramento General Plan are applicable to the Proposed Project:

Goal A: Provide adequate fire service for all areas of the City.

Policies:

1. Continue to support all efforts directed at providing the best fire protection services at the least cost.
2. Ensure that adequate water supplies are available for fire-fighting equipment in newly developing areas.

9 Greg Hoeger, City of Sacramento, written communication to Grace Hovey, City of Sacramento, November 5, 2002.

10 California Public Resources Code, Part 2, Chapter 2 (<http://www.leginfo.ca.gov>).

3. Work with the various fire protection districts bordering the City in establishing centralized communications and fire-fighter training facilities.
4. Promote greater coordination of land use development proposals with the Fire Department in order to ensure adequate on-site fire protection provisions.
5. Promote greater use of fire sprinkler systems for both commercial and residential use.

North Natomas Community Plan

The following guiding and implementing policies from the NNCP are applicable to the Proposed Project:

Guiding Policies:

- A. Provide excellent fire and police protection to the residents, workers, and visitors to the North Natomas Community.

Implementing Policies:

Fire: The plan envisions two 1-acre fire stations to be located in the North Natomas Community: one in the northeast corner of the Northpointe subdivision and the other just south of the Westside Commercial Center. Prior to development, the City Fire Department must verify that adequate fire protection services, including equipment and personnel, exists to serve the project, or will be provided, to achieve and maintain a fire insurance rating of 2.0, either through a funded program or as a condition of approval for the project. The Fire Department requires a fire station to be provided prior to 40 percent of the land being developed within the fire service area. A fire service zone identifies the primary and secondary response areas of the core fire company unit. Locating fire stations near parks is encouraged to enhance the sense of safety in the park.

IMPACTS AND MITIGATION

Method of Analysis

The City of Sacramento Fire Department was contacted for up-to-date background information related to current levels of service. This information, along with projected project demand and relevant policy guidelines, were used to determine the project impact.

Standards of Significance

For the purposes of this EIR, an impact is considered significant if implementation of the Proposed Project or alternatives would:

- Create an increased demand for fire protection that would substantially interfere with the ability of the fire department to provide adequate service.

Impacts and Mitigation Measures

Impact

7.5-3 Increased demand for fire protection services. (Project-specific)

The Proposed Project would result in the generation of approximately 4,184 employees, but would not directly result in a population increase in the North Natomas area, as the project does not

include a residential component (for a further discussion of population increases, see Chapter 6, Population, Employment, and Housing). The Sacramento Fire Department would provide service to the project primarily from Station 81.

Although the Proposed Project would not create a new population that would result in the need for new fire protection staff or facilities, the project would result in large-scale development on a site that is currently undeveloped, and could result in a slightly higher emergency call volume in the event of fire or situations requiring EMT services. Response times could also be compromised by the addition of more emergency trips. However, it is not anticipated that the Proposed Project would create a substantial increase in demand for fire protection services that would compromise the current 5-minute response time or otherwise prevent the SFD from providing adequate service. This is considered a *less-than-significant impact*.

Mitigation

7.5-3 Increased demand for fire protection services. (Project-specific)

No mitigation measures would be required for the Proposed Project.

Impact

7.5-4 Increased demand for fire protection services. (Cumulative)

Development in the North Natomas area and its associated effects on fire protection services were taken into account in the NNCP. Rapid development in the North Natomas area will require that fire protection services be augmented in order to accommodate increasing demand from the area's growing population. The Proposed Project would not cause a population increase in the North Natomas area, and therefore would not significantly contribute to the need for additional fire protection services in the area. This cumulative impact would be considered *less than significant*.

Mitigation

7.5-4 Increased demand for fire protection services. (Cumulative)

No mitigation measures would be required for the Proposed Project.

WATER SUPPLY AND TREATMENT

ENVIRONMENTAL SETTING

The City of Sacramento operates two active water diversion and treatment facilities: the Sacramento River and E.A. Fairbairn Water Treatment Plants. The Sacramento River Water Treatment Plant has a reliable capacity of 110 million gallons per day (mgd). The E.A. Fairbairn Water Treatment Plant has a reliable capacity for 90 mgd, for a total reliable water treatment capacity of 200 mgd.

The City is planning a 100 mgd expansion to the Fairbairn Water Treatment Plant and a 50 mgd expansion of the Sacramento River Treatment Plant.¹¹

The City's water distribution system consists of one pressure zone with two active water treatment plants (previously described), 10 storage reservoirs, 36 municipal water wells, and approximately 1,420 miles of water mains ranging in size from 4 to 60-inches in diameter. Only 25 out of the total 36 municipal wells operated by the City are currently active with average day production of 23 mgd. The Sacramento River Water Treatment Plant pumps an average of 50 mgd of water per year, and Fairbairn Water Treatment Plant pumps an average of 55 mgd.

Future (Year 2005) additional production from Fairbairn WTP is 100 mgd. Future (year 2004) additional production from the Sacramento WTP is 50 mgd. Total future reliable production is 360 mgd. The expansion for both plants is under construction.¹² The average combined daily pumping rate from the treatment plant is 105 mgd, with a maximum of 184 mgd.¹³

The City of Sacramento currently has water rights of 192,000 AFY from the Sacramento and American Rivers (144,000 AFY from the American River, and 48,000 AFY from the Sacramento River) for the year 2002. The City's water rights peak at 326,800 AFY from the Sacramento and American Rivers (245,000 AFY from the American River, and 81,800 AFY from the Sacramento River) for the year 2030 and subsequent years.¹⁴

The Fiscal Year 2001/02 total city-wide surface water demand was 113,978 AFY, with an average day demand of approximately 123 mgd.¹⁵ Average maximum day demand is 185 mgd. With an average water demand of 138,250 AFY, the City has an excess supply of 54,250 AFY per year of water.

Existing water conveyance infrastructure in the project area consists of 12-inch water lines in public right of ways. These are located on Truxel Road and Gateway Park Boulevard.¹⁶

REGULATORY CONTEXT

Federal

There are no specific federal regulations pertaining to water supply and treatment applicable to this project and relevant under CEQA.

11 Kathy Mullen, Water and Sewer Superintendent, City of Sacramento Department of Utilities, personal communication, March 1, 2001.

12 City of Sacramento Planning Department, November 2002.

13 Kathy Mullen, Water and Sewer Superintendent, City of Sacramento Department of Utilities, personal communication, March 1, 2001.

14 Gary Gosse, City of Sacramento Department of Utilities, personal communication, April 30, 2002.

15 City of Sacramento, *North Delta Shores Mitigated Negative Declaration and Draft Initial Study*, March 2002, page 64.

16 Dave Schamber, Supervising Engineer, City of Sacramento Department of Utilities, personal communication, April 15, 2002.

State**Senate Bill 610**

Senate Bill 610 (SB 610), enacted in 2001, requires substantial evidence of adequate water supply for large-scale projects. Senate Bill 610 expands the requirement for public water systems to prepare water supply assessments for all large-scale projects. Such projects can include:

- Residential developments over 500 units, or other uses demanding water equivalent to 500 development units or more;
- Shopping center or business with over 1,000 employees or 500,000 sf;
- Commercial office with over 1,000 employees or 250,000 sf;
- Hotel or motel with over 500 rooms;
- Industrial use or park with over 1,000 employees, 40 acres, or 650,000 sf; and
- Mixed use project with one or more uses described above.

Under SB 610, preparation of the water supply assessment is not limited to projects that need EIRs or amendments to general plans and specific plans. In addition, SB 610 requires smaller public water systems (those with less than 5,000 connections) to prepare water supply assessments on projects that would increase their service connections by 10% or more.

The bill requires more information about water supply contracts, capital outlay programs, permits, and regulatory approvals to be included in water supply assessments. SB 610 also increased the time for public water systems to approve their water supply assessments from 30 days to 90 days. If the city or county cannot identify a public water system to provide the water supply assessment, SB 610 requires the State Department of Water Resources to prepare the assessment.

SB 610 also expanded requirements for urban water management plans to include more information about groundwater supply information.

The Proposed Project is a mixed use development that would result in 4,184 employees, and is therefore subject to SB 610.

Local**City of Sacramento General Plan**

The following goals and policies from the City of Sacramento General Plan are applicable to the Proposed Project:

Goal A: Provide and improve water supply facilities to meet the future growth of the City and assure a continued supply of safe potable water.

Policies:

1. Develop and adopt a comprehensive water policy for the City of Sacramento that is consistent with a long range adopted plan.

2. Develop and implement a financing strategy which the City can use to construct needed water facilities.
3. Work with property owners to develop financing arrangements in order to provide needed water facilities in newly developed areas.
4. Give high priority in the Capital Improvements Program to funding infrastructure in highly depressed and designated infill areas.
5. Provide water services meeting or exceeding State and federal regulatory agency requirements.

North Natomas Community Plan

The following guiding and implementing policies from the NNCP are applicable to the Proposed Project:

Guiding Policies: [UTILITIES]

- A. Provide public and private utilities to all land uses in the North Natomas Community.
- B. Provide guidance necessary for new development to demonstrate the provision of adequate public facilities and services.
- C. Maintain adequate levels of service to prevent services from being insufficient and deteriorating as growth occurs.
- D. Levels of service shall be consistent with policies contained in the respective elements of the General Plan or Master Plans prepared by respective service providers.

IMPACTS AND MITIGATION

Method of Analysis

Water demand numbers for the Proposed Project have been estimated from the SGPU EIR average maximum daily water use for commercial development. It was assumed that potable water would be used for landscaping. According to the City of Sacramento, water demand is calculated at a rate of 3 AFY for Commercial Land Uses, and 4 AFY for Offices (see Table 7.5-1). These demand rates were applied to the proposed square footage for the Proposed Project to determine water demand. In addition, the City of Sacramento Utilities Department was contacted for up-to-date background information related to current levels of service. This information, along with projected project demand and relevant policy guidelines, were used to determine the project impact.

Standards of Significance

For the purposes of this EIR, an impact is considered significant if implementation of the Proposed Project or alternatives would:

Land Use	Acre feet per year/acre
Commercial	3
Office	4

Note: Where the land use designation was HC/W or Office, the higher Industrial water demand was used for a more conservative estimate.
Source: City of Sacramento Department of Utilities, 2002.

- Substantially increase the demand for potable water in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand; or
- Result in inadequate water supply, treatment, capacity, and/or infrastructure to supply the project with no plans or processes in place for obtaining needed infrastructure.

Impact

7.5-5 Increased demand for potable water. (Project-specific)

Table 7.5-2 shows the estimated water demand for the Proposed Project. As stated above under the Environmental Setting, the City of Sacramento currently has water rights for a total of 192,000 AFY from the Sacramento and American Rivers, and a maximum of 326,800 AFY from the Sacramento and American Rivers for the year 2030 and beyond. The Proposed Project would result in water demand of 341 AFY. With an average excess water supply of 54,250 AFY, the existing City of Sacramento water rights would be adequate to accommodate the Proposed Project. Therefore, this is considered a *less-than-significant impact* for the Proposed Project.

	Proposed Project
Total Square Feet	1,255,000
Total Acres	104.8
Commercial	78.2
Office	26.6
Total Demand (afy)¹	341
Total Demand (mgd)	.304

¹ Used water demand rate for commercial land use of 3 acre feet/year/acre and water demand rate for commercial land use of 4 acre feet/year/acre.
Source: EIP Associates, 2003.

*Mitigation***7.5-5 Increased demand for potable water. (Project-specific)**

No mitigation measures would be required for the Proposed Project.

*Impact***7.5-6 Increased demand for water treatment and/or infrastructure. (Project-specific)**

The Proposed Project would use a system of 12-inch lines that would tie into existing 12-inch lines located in the nearby public rights of way along Truxel Road and Gateway Park Boulevard.¹⁷ A 12-inch water main extension is required for the project in Gateway Park Boulevard from Truxel Road to the north property line of the project (approximately 1600 feet). This infrastructure would be adequate to handle the water demand created by the Proposed Project.

Table 7.5-2 shows the estimated water demand for the Proposed Project. As stated above under the Environmental Setting, the Sacramento River Water Treatment Plant and the E.A. Fairbairn Water Treatment Plant have reliable capacities of 110 mgd and 90 mgd, respectively, for a total reliable water treatment capacity of 190 mgd. In addition, a 100-mgd expansion to the Fairbairn Water Treatment Plant and a 50-mgd expansion of the Sacramento River Treatment Plant are currently under construction.¹⁸ This water treatment infrastructure would be adequate to accommodate the Proposed Project. Therefore, this is considered a *less-than-significant impact* for the Proposed Project.

*Mitigation***7.5-6 Increased demand for water treatment and/or infrastructure. (Project-specific)**

No mitigation measures would be required for the Proposed Project.

*Impact***7.5-7 Increased demand for potable water. (Cumulative)**

Rapid development in the North Natomas area will increase demand for potable water and could require acquisition of new water rights in order to accommodate increasing demand from the area's growing population. According to the 1988 SGPU EIR, maximum water demand in the year 2016 (buildout year) would be approximately 368.2 mgd (412,438 AFY).¹⁹ The Proposed Project is anticipated to contribute 341 AFY (0.304 mgd). The City of Sacramento currently has an average excess water supply of 54,250 AFY, and would be able to supply additional future planned projects. Therefore, this impact would be cumulatively *less than significant*.

17 Dave Schamber, Supervising Engineer, City of Sacramento Department of Utilities, personal communication, April 15, 2002.

18 Kathy Mullen, Water and Sewer Superintendent, City of Sacramento Department of Utilities, personal communication, March 1, 2001.

19 City of Sacramento, *Sacramento General Plan Update Draft Environmental Impact Report*, March 1987, page H-5.

*Mitigation***7.5-7 Increased demand for potable water. (Cumulative)**

No mitigation measures would be required for the Proposed Project.

*Impact***7.5-8 Increased demand for water treatment and infrastructure. (Cumulative)**

Rapid development in the North Natomas area will require additional water treatment facilities and infrastructure. As stated above under Impact 7.5-6, the Proposed Project would use a system of 12-inch lines that would tie into existing City infrastructure and water would be treated at the Sacramento River Water Treatment Plant or the Fairbairn Water Treatment Plant. With the planned expansion of both treatment plants, there would be adequate capacity to serve the planned growth under the NNCP. As stated under Impact 7.5-7, the Proposed Project would contribute 0.304 mgd which would not constitute a cumulatively considerable increase in water treatment for the North Natomas area or the City of Sacramento, and therefore would not significantly contribute to cumulative treatment or water infrastructure impacts in the area. This impact would be considered cumulatively *less than significant*.

*Mitigation***7.5-8 Increased demand for water treatment and infrastructure. (Cumulative)**

No mitigation measures would be required for the Proposed Project.

WASTEWATER TREATMENT AND CONVEYANCE**ENVIRONMENTAL SETTING**

Wastewater treatment services within the Sacramento area are provided by the Sacramento Regional County Sanitation District (SRCSD) and the three contributing agencies (Sacramento County Sanitation District No. 1 (CSD-1), and the cities of Sacramento and Folsom) that comprise the SRCSD service area. SRCSD provides transport, treatment, and disposal of the wastewater generated within the three collections systems, while the three contributing agencies provide wastewater collection services.²⁰ The Proposed Project site is located within the CSD-1 Service Area.²¹

The Sacramento Regional Wastewater Treatment Plant (Regional Plant) is the main SRCSD wastewater treatment plant. This plant is located on a 3,500-acre site between Franklin and I-5, north of Laguna. The Regional Plant has an existing wastewater treatment capacity of approximately 390 mgd of wet weather flow during peak wet weather conditions. The Plant

20 County of Sacramento, *Sacramento Regional County Sanitation District and Sacramento County Sanitation District No. 1, Sacramento Sewerage Expansion Study*, prepared by James M. Montgomery, April 1993, page 1-1.

21 Mike Maggi, Principal Engineer, City of Sacramento Water Quality Department, personal communication, February 21, 2001.

currently treats an average of 181 million gallons of wastewater a day.²² The Regional Plant discharges secondarily-treated effluent into the Sacramento River, downstream of the City's domestic water supplies.²³

The SRCSD and CSD-1 are both separate political subdivisions of the State of California formed under the State of California Health and Safety Code.²⁴ As such, the Districts' policies must conform to the statutes of the State Health and Safety Code. Additionally, the Districts are separately funded entities that do not depend upon Sacramento County for funding capital improvements, maintenance, or operations. Revenues collected by the Sanitation Districts are restricted to uses that conform to the Districts' legislated mission and responsibilities. User fees provide for the system's operation and maintenance, while hookup fees provide most of the funding for new trunks and interceptors.

The wastewater conveyance pipe nearest to the project site is an 18-inch pipe that does not have additional conveyance capacity. However, two proposed trunk lines are planned as part of the CSD-1 Master Plan (21 inches and 24 inches), and would be located east and north of project site. The trunk lines would be constructed when demonstrated demand is there. These trunk lines are considered "Phase 1" under the CSD-1 Master Plan, which indicates they will be constructed between 2001 and 2005. Because there is currently no additional capacity for new development, any new project would trigger construction of the full trunk line regardless of the particular project's demand. This is done so that expansion is not necessary on a project-by-project basis. Demand for these trunk lines has already been triggered by other development in the North Natomas area.²⁵

The SRCSD requires a regional connection fee be paid to the District for any users connecting to or expanding sewer collection systems if they connect to an interceptor or a plant (Regional Connection Fee Ordinance, SRCSD Ordinance No. SRCSD-0043). If connected to the local collection facilities, this fee is paid directly to the local agency (CSD-1, City of Sacramento, etc.).²⁶

REGULATORY CONTEXT

State and Federal

The Federal Clean Water Act and regulations set forth by the California Department of Health Services and SWRCB are aimed primarily at discharges of effluent to surface waters. Title 40 of the Code of Federal Regulations (CFR) Part 503, Title 23 California Code of Regulations, and standards established by the CVRWQCB regulate the disposal of biosolids.

22 Stan Dean, Plant manager, Sacramento Regional Wastewater Treatment Plant, personal communication, February 21, 2001.

23 *Draft Environmental Impact Report, City of Sacramento General Plan Update*, City of Sacramento, March 1987.

24 County of Sacramento, General Plan, Planning for the 21st Century, Public Facilities Element of the County of Sacramento General Plan, December 15, 1993.

25 Christoph Dobson, Senior Civil Engineer, County of Sacramento, Department of Water Quality, personal communications April 16, 2002 and April 18, 2002.

26 Stan Dean, Plant manager, Sacramento Regional Wastewater Treatment Plant, personal communication, February 21, 2001.

Local**City of Sacramento General Plan**

The following goals and policies from the City of Sacramento General Plan are applicable to the Proposed Project:

Goal A: Provide adequate sewer service for all urbanized or developing neighborhoods.

Policies:

1. Provide and upgrade sewer facilities where needed to newly developing areas in the City.
2. Develop plans for extension of sewer lines to existing developed areas where sewer service is lacking.
3. Work with property owners to develop financing arrangements in order to provide sewer services.

North Natomas Community Plan

The following guiding and implementing policies from the NNCP are applicable to the Proposed Project:

- Guiding Policies: [UTILITIES]**
- A. Provide public and private utilities to all land uses in the North Natomas Community.
 - B. Provide guidance necessary for new development to demonstrate the provision of adequate public facilities and services.
 - C. Maintain adequate levels of service to prevent services from being insufficient and deteriorating as growth occurs.
 - D. Levels of service shall be consistent with policies contained in the respective elements of the General Plan or Master Plans prepared by respective service providers.

Implementing Policies:

Sanitary Sewers: Prior to any development occurring, the Sacramento Regional County Sanitation District, County Sanitation District No. 1 and the City Utilities Department must verify that adequate sanitary sewer system capacity exists to serve the specific project or will be provided through a funded program and/or a condition of approval of the project.

IMPACTS AND MITIGATION**Method of Analysis**

Wastewater numbers for the Proposed Project have been estimated from the CSD-1 wastewater unit of flow rate for commercial and industrial land use. Average dry weather flows are calculated assuming a minimum flow value of 1,860 gallons per day per net acre. Peak wet weather flows are determined by factoring an inflow and infiltration peaking factor to the average dry weather flow (minimum 1,200 gallons/day/acre). The overall wastewater treatment demand generation rate is

2,000 gallons per acre per day.²⁷ This demand rate was applied to the proposed square footage as well as the maximum developed square footage for the Proposed Project.

Because phasing and occupancy information is not currently available for the Proposed Project, impacts were determined for project buildout. Phasing of the Proposed Project would cause impacts to occur over an extended period of time, which could reduce immediate burdens on services.

In addition, the Regional Plant was contacted for up-to-date background information related to capacity and current levels of service. This information, along with projected project demand and relevant policy guidelines, were used to determine the project impact.

Standards of Significance

For the purposes of this EIR, an impact is considered significant if implementation of the Proposed Project or alternatives would:

- Create an increased quantity of wastewater that would exceed the City collection, treatment, and disposal capabilities; or
- Result in inadequate wastewater infrastructure to supply the project with no plans or processes in place for obtaining needed infrastructure.

Impacts and Mitigation Measures

Impact

7.5-9 Increased demand for City wastewater collection, treatment, and disposal. (Project-specific)

Table 7.5-3 shows the estimated wastewater demand of the Proposed Project. As stated above under the Environmental Setting, the Regional Plant has a current capacity of approximately 390 mgd, and currently receives approximately 181 mgd. The Proposed Project would result in a wastewater treatment demand of 0.210 mgd. The remaining capacity of approximately 209 mgd at the wastewater treatment facility would be adequate to accommodate wastewater treatment demand for the Proposed Project. In addition, the Phase 1 trunk lines planned under the CSD-1 Master Plan would provide adequate wastewater conveyance infrastructure to meet this demand. Therefore, this is considered a *less-than-significant impact* for the Proposed Project.

Mitigation

7.5-9 Increased demand for City wastewater collection, treatment, and disposal. (Project-specific)

No mitigation measures would be required for the Proposed Project.

²⁷ Christoph Dobson, County Sanitation District 1, personal communication, July 2002.

TABLE 7.5-3	
PROPOSED PROJECT WASTEWATER DEMAND	
Total Square Feet	1,255,000
Total Acres	104.8
Total Demand (gpd)	209,600
Total Demand (mgd)	0.210
1 Used commercial and office land use rate of 2,000 gallons per acre per day. Source: EIP Associates, 2001.	

*Impact***7.5-10 Increased demand for wastewater collection, treatment, and disposal. (Cumulative)**

Development in the North Natomas area will require additional wastewater treatment facilities in order to accommodate increasing demand from the area's growing population. According to the 1988 SGPU EIR, maximum wastewater demand in the year 2016 (buildout year) would be approximately 129.1 average daily dry-weather flow and 305.9 mgd peak wet weather flow.²⁸ The Proposed Project would contribute 0.210 mgd to this demand. The addition of 0.210 mgd would not constitute a substantial increase in wastewater treatment demand for the North Natomas area or the City of Sacramento, and therefore would not be considered a cumulatively considerable contribution. In addition, adequate infrastructure would be available to serve the Proposed Project; therefore there would be no contribution to adverse impacts on wastewater infrastructure. This would be considered a *less-than-significant cumulative impact*.

*Mitigation***7.5-10 Increased demand for wastewater collection, treatment, and disposal. (Cumulative)**

No mitigation measures would be required for the Proposed Project.

ENERGY SERVICES**ENVIRONMENTAL SETTING**

Electricity for the Proposed Project would be provided by the Sacramento Municipal Utilities District (SMUD). SMUD provides electric service to the Sacramento Metropolitan area, including the North Natomas area. Natural gas services for the Proposed Project would be provided by Pacific Gas and Electric Company (PG&E). A temporary 12 kilovolt (kv) overhead power line located along Truxel Road and Gateway Park Blvd would likely serve the Proposed Project, at least

in its early stages. This line dips underground at North Freeway Boulevard, and power lines servicing the Proposed Project would be located underground, as required in the NNCP.²⁹

Because phasing and occupancy information is not currently available for the Proposed Project, impacts were determined for project buildout. Phasing of the Proposed Project would cause impacts to occur over an extended period of time, which could reduce immediate burdens on services.

Six-inch gas mains are located under Gateway Park Boulevard. Gas mains of varying sizes are also located under Truxel Road. A high pressure regulator is located at Truxel Road and Gateway Park Boulevard and would serve the project site.

REGULATORY CONTEXT

Federal

The Federal Energy Regulatory Commission duties include the regulation of the transmission and sale of electricity in interstate commerce, licensing of hydroelectric projects, and oversight of related environmental matters.

State

California Public Utilities Commission (CPUC)

CPUC Decision 95-08-038 contains the rules for the planning and construction of new transmission facilities, distribution facilities and substations. The Decision requires permits for the construction of certain power line facilities or substations if the voltages would exceed 50 kv or the substation would require the acquisition of land or an increase in voltage rating above 50 kv. Distribution lines and substations with voltages less than 50 kv need not comply with this Decision; however, the utility must obtain any non-discretionary local permits required for the construction and operation of these projects. CEQA compliance is required for construction of facilities constructed in accordance with the Decision.

Title 20 and Title 24, California Code of Regulations (CCR)

Title 20, Public Utilities and Energy, contains the regulations related to power plant siting certification. Title 24, California Building Standards, contains the energy efficiency standards related to residential and nonresidential buildings. Title 24 standards are based, in part, on a State mandate to reduce California's energy demand.

29 Gene Hoppes, Engineering Designer 4, Sacramento Municipal Utilities District, personal communication, February 5, 2002.

Local**City of Sacramento General Plan**

The following goals and policies from the City of Sacramento General Plan are applicable to the Proposed Project:

Goal A: Continue to improve and provide communication and utility services to all areas of the City.

Policies:

3. Continue to work closely with utility companies on long-range planning for newly developing areas.
2. Support and encourage the utility companies to place utilities underground in new development areas.

North Natomas Community Plan

The following guiding and implementing policies from the NNCP are applicable to the Proposed Project:

Guiding Policies: [UTILITIES]

- A. Provide public and private utilities to all land uses in the North Natomas Community.
- B. Provide guidance necessary for new development to demonstrate the provision of adequate public facilities and services.
- C. Maintain adequate levels of service to prevent services from being insufficient and deteriorating as growth occurs.
- D. Levels of service shall be consistent with policies contained in the respective elements of the General Plan or Master Plans prepared by respective service providers.

Implementing Policies:

Energy Efficiency: Prior to any development occurring, the project proponent must consult with SMUD's New Construction Service Staff to incorporate SMUD energy efficiency programs where feasible. The objective of the New Construction Service program is to maximize the energy efficiency potential of new construction projects consistent with SMUD's system design capacity and energy conservation goals through cost-effective investments and technical assistance for designers and builders.

IMPACTS AND MITIGATION**Method of Analysis**

SMUD and PG&E were contacted for up-to-date background information related to current levels of service and demand rates. SMUD uses a rate of 2.3-3 kilowatt per square foot (KW/sf) to estimate electrical demand for commercial land uses. For a conservative estimate, the rate of 3 KW/sf was applied to the proposed square footage of the project in order to estimate energy use. Natural gas demand rates used were 50 BTU/sf for light commercial, and 0.75 to 0.8 million cubic

feet per acre (mcf/ac) for general commercial uses. This information, along with relevant policy guidelines, was used to determine the project impact.

Standards of Significance

For the purposes of this EIR, an impact is considered significant if implementation of the Proposed Project or alternatives would:

- Substantially increase the demand for natural gas service in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand; or
- Substantially increase the demand for electricity service in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand.

Impacts and Mitigation Measures

Impact

7.5-11 Increased demand for electricity and natural gas service. (Project-specific)

As shown in Table 7.5-4, the Proposed Project would construct approximately 751,000 sf of Retail land uses and approximately 504,000 sf of Office uses. Using SMUD's electricity demand rates for Commercial land uses, the projected electricity demand would be approximately 10,315 KW/day. SMUD has indicated that it could accommodate electricity demand created by the Proposed Project.³⁰ With regard to natural gas services, PG&E has indicated that gas distribution lines and other existing infrastructure have ample capacity to serve the project site.³¹ Therefore, this is considered a *less-than-significant impact*.

TABLE 7.5-4	
PROPOSED PROJECT ENERGY DEMAND	
Total Square Feet	1,255,000
Total Demand (KW/yr)	3,765,000
Total Demand (KW/day)	10,315
Source: EIP Associates, 2001.	

Mitigation

7.5-11 Increased demand for electricity and natural gas service. (Project-specific)

30 Gene Hoppes, Engineering Designer 4, Sacramento Municipal Utilities District, personal communication, February 5, 2002.

31 Hal Hackney, Gas Planning Engineer, PG&E, personal communication, October 16, 2002.

No mitigation measures would be required for the Proposed Project.

Impact

7.5-12 Increased demand for electricity and natural gas service. (Cumulative)

The SGPU EIR estimates peak buildout demand for energy to be 2,158,746 kw.³² Development in the North Natomas area and its associated effects on electricity and natural gas were taken into account in the NNCP and the SGPU. Rapid development in the North Natomas area will require additional electric and natural facilities in order to accommodate increasing demand from the area's growing population. Such facilities are under construction statewide, due to the recently recognized energy crisis. Future development will benefit from the current attention to energy issues and infrastructure, as the facilities currently being planned and constructed will be available to future development projects. The Proposed Project would not cause a substantial increase in energy demand for the North Natomas area or the City of Sacramento, and therefore would not significantly contribute to cumulative energy demand in the area. This impact would be cumulatively *less than significant*.

Mitigation

7.5-12 Increased demand for electricity and natural gas service. (Cumulative)

No mitigation measures would be required for the Proposed Project.

SOLID WASTE DISPOSAL

ENVIRONMENTAL SETTING

Solid waste collection for commercial properties and business is available within the City of Sacramento by 17 service providers, including the City of Sacramento. Each business and commercial property is responsible for contracting for its own solid waste collection service. There are two large volume transfer stations (Sacramento Recycling and Transfer Station, owned by BLT Enterprises and Allied Waste BFI Transfer) and two local landfills (Yolo County landfill and Kiefer Boulevard Landfill) in the project area. Several recycling facilities are also locally available. The commercial solid waste haulers can dispose of the collected waste at the landfill facility or transfer station that they select.³³

Kiefer Landfill is the primary municipal solid waste disposal facility in Sacramento County. The Kiefer Boulevard Landfill received approximately 533,744 tons of solid waste in 2000. Waste is accepted from the general public, businesses, and private waste haulers. It is the prerogative of a private waste handler to dispose of solid waste at transfer stations (e.g., BLT Recycler's and Transfer Station). However, a majority of residential solid waste is trucked directly to Kiefer Landfill for disposal. The landfill facility is located near the intersection of Kiefer Boulevard and Grantline

32 City of Sacramento General Plan, March 1987, Exhibit R-2.

33 Gary Van Dorst, City of Sacramento Department of Public Works, personal communication, February 21, 2001.

Road and comprises 1,084 acres. The Kiefer Landfill is open seven days a week. The Landfill is currently in the process of expanding to ensure that sufficient disposal capacity is available to handle the current waste stream until at least the year 2039. The Landfill has approval and necessary permits to expand this facility. The Landfill has a total refuse volume capacity of 102 million cubic yards. The remaining capacity at the Landfill is approximately 90 million cubic yards.³⁴

REGULATORY CONTEXT

Federal

Volume 40 of the Code of Federal Regulations, Part 258 (Resource Conservation and Recovery Act (RCRA, Subtitle D) contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design, groundwater monitoring, and closure of landfills.

State

Assembly Bill 939

In 1989, the California Legislature passed a law requiring California cities to implement plans designed to reduce waste deposited in landfills by 50 percent per person by December 31, 2000 (AB 939). As part of AB 939, cities and counties were required to develop a Source Reduction and Recycling Element (SRRE). Due to the solid waste diversion and recycling requirements of AB 939, future solid waste levels are not anticipated to increase dramatically in the future.

Local

City of Sacramento General Plan

The following goals and policies from the City of Sacramento General Plan are applicable to the Proposed Project:

Goal A: Provide adequate solid waste disposal facilities and services for collection, storage and reuse of refuse.

Policies:

1. Continue present landfill operations at the present 28th and A Street site until capacity is reached.
2. Develop transfer station capacity as an interim solid waste disposal option, and design the facility(s) for compatibility with potential waste processing and recycling operations.
3. Continue the Neighborhood Clean Up Program and develop and implement additional programs when necessary.
4. Explore programs and new techniques of solid waste disposal to reduce the need for landfill sites.
5. Continue to coordinate efforts with Sacramento County to provide long-term landfill disposal capacity.

34 Chris Richgels, Kiefer Landfill, personal communications, January 2000.

6. Expand recycling and composting efforts to the maximum extent feasible in order to reduce the volume and toxicity of solid wastes that must be sent to landfill facilities.

Local Solid Waste Authority Ordinance 8

Local Solid Waste Authority Ordinance 8 (Ordinance 8) was established to regulate the transport, transfer, disposal, and recycling of commercial solid waste kept or accumulated within the Sacramento Regional Solid Waste Authority region. The ordinance was put into place for the purposes of ensuring the orderly operation of solid waste transport and disposal, and also to minimize adverse effects on human health and the local environment. Sections 24 and 25 of Ordinance 8 specify that commercial franchisees must divert 30 percent of their commercial solid waste for recycling, and establishes a recycling incentive fee for tonnage shortfall of waste diversion. Section 35 provides restrictions for solid waste disposal, including prohibiting the dumping of solid waste any property, road, or highway not designated by the ordinance for solid waste disposal or dumping.

North Natomas Community Plan

The following guiding and implementing policies from the North Natomas Community Plan are applicable to the Proposed Project:

Guiding Policies: [UTILITIES]

- A. Provide public and private utilities to all land uses in the North Natomas Community.
- B. Provide guidance necessary for new development to demonstrate the provision of adequate public facilities and services.
- C. Maintain adequate levels of service to prevent services from being insufficient and deteriorating as growth occurs.
- D. Levels of service shall be consistent with policies contained in the respective elements of the General Plan or Master Plans prepared by respective service providers.

Implementing Policies:

Solid Waste: Prior to any development occurring, the City County Solid Waste Joint Powers Authority must verify that waste removal service and disposal facilities exist to serve the project or will be provided through a funded program. A curbside recycling program shall be required as part of the collection service.

Zoning Ordinance - Section 34

In 1991, an amendment was added (Section 34) to the Zoning Ordinance to address recycling and solid waste disposal requirements for new and existing developments. This plan requires that all new commercial, office, industrial, public/quasi-public, and 5-unit or more multiple family residential developments prepare a recycling program before issuance of a building permit. The recycling program must include a flow chart depicting the routing of recycled materials, and a site plan specifying the location and design components and storage locations associated with recycling efforts. The required recycling program also includes the development of the following: a construction plan to identify the recyclable materials being used in the construction of the proposed

structures, a demolition plan identifying the proposed recycling of reusable or recyclable building materials in the demolition of any existing structures, and an educational program about recycling.

IMPACTS AND MITIGATION MEASURES

Method of Analysis

The City of Sacramento Department of Public Works was contacted for up-to-date background information related to solid waste disposal service and generation rates. Solid waste demand rates provided by the City of Sacramento Department of Utilities were applied to the proposed square footage (See Table 7.5-5). These demand rates assume 0.018 cubic yards/day of solid waste for commercial land uses and 0.009 cubic yards/day for office uses.

SOLID WASTE DEMAND RATES			
Land Use	Lbs./100sf/day	Lbs./sf/day	Cubic yds/day
Commercial	2.5	0.025	0.018
Office	1	0.01	0.009
<small>Source: National Solid Waste Management Association.</small>			

Along with projected project demand, relevant policy guidelines were used to determine the project impact.

Standards of Significance

For purposes of this environmental document, an impact is considered significant if the Proposed Project or alternatives would:

- Substantially increase the production of solid waste in excess of available distribution or landfill capacity without also including provisions to adequately accommodate the increased production.

Impacts and Mitigation Measures

Impact

7.5-13 Increased production of solid waste in excess of available distribution or landfill capacity. (Project-specific)

The Proposed Project would construct approximately 751,000 sf of retail land uses and approximately 504,000 sf of office uses. Using the solid waste demand rates for Commercial and Office land uses provided by the City, the projected solid waste demand for the Proposed Project would be approximately 18,054 cubic yards per day (6,589,710 cubic yards per year) would be generated. In addition, this solid waste generation would be subject to a minimum of 30% diversion to recycling facilities under Local Solid Waste Authority Ordinance 8. Office land uses generally

divert up to 90% of solid waste and Commercial land uses can divert up to 50% of solid waste.³⁵ As stated above, the Kiefer Boulevard Landfill had a remaining capacity of approximately 90 million cubic yards.³⁶ The project's demand for solid waste facilities could be accommodated by the Kiefer facilities. This is considered a *less-than-significant impact*.

TABLE 7.5-6	
PROPOSED PROJECT SOLID WASTE DEMAND	
	Proposed Project
Total Square Feet	1,255,000
Total Demand (cubic yds/day)	18,054
Source: EIP Associates, 2001.	

Mitigation

No mitigation is required for the Proposed Project.

Impact

7.5-14 Increased production of solid waste in excess of available distribution or landfill capacity. (Cumulative)

Development in the North Natomas area would require additional solid waste handling facilities in order to accommodate increasing demand from the area's growing population. The Proposed Project, in combination with other projects in North Natomas and the City of Sacramento, would contribute to an increase in solid waste; however, the project's contribution would not be cumulatively considerable. Therefore, this would be considered a *less-than-significant cumulative impact*.

Mitigation

No mitigation is required for the Proposed Project.

35 Mike Root, Waste Reduction Coordinator, City of Sacramento, personal communication, December 12, 2002.

36 <http://www.ciwmb.ca.gov/SWIS/detail.asp?PG=DET&SITESCH=34-AA-0001&OUT=HTML>



7.6 Public Health/Hazards



7.6 PUBLIC HEALTH AND HAZARDS

INTRODUCTION

This section of the EIR describes issues related to human health and the environment due to exposure to public safety hazards and hazardous materials that could be generated during construction and operation of the Proposed Project. As discussed in the Initial Study prepared for the Proposed Project (see Appendix B of Volume II of the Promenade at Natomas/Sacramento Auto Loop Project DEIR), the following impacts were determined to be less than significant, and will not be discussed in detail in this EIR: handling of hazardous materials within one quarter mile of a school, identification on the Cortese list of the site, or issues associated with proximity to a public or private airport. No public comments related to hazardous materials were received in response to the Notice of Preparation (July 2000 or September 2002).

Some, or all, of the project site could be subject to risks associated with flooding and geologic hazards. Existing conditions and analysis of these potential hazards are presented in Section 7.8, Hydrology and Water Quality.

ENVIRONMENTAL SETTING

Project Site Environmental Setting/Site Conditions

The project site consists of an undeveloped 126-acre parcel that has historically been used for agricultural purposes since at least 1937. At the time of a site visit on January 3, 2001, there were no crops or vegetation growing on the site. The topography of the site is flat, and the elevation of the project site is approximately 10 feet above mean sea level.¹

According to the Phase I Environmental Site Assessment (Phase I ESA) prepared for the project site by McLaren/Hart, Inc in 1999 (see Appendix H), the depth to groundwater in the vicinity of the project site is approximately 15 to 20 feet below ground surface, with groundwater flowing west to southwest.²

Summary of Phase I Environmental Site Assessment

The following information is a summary of the Phase I ESA prepared for the project site by McClaren/Hart, Inc. in 1999. The Phase I ESA performed a survey of federal, State, and local environmental regulatory databases, which included the databases compiled pursuant to Government Code Section 95962.5, commonly known as the "Cortese List." No hazardous material release sites were identified within a one-mile radius of the project site, with the exception

-
1. USGS 7.5 Minute Rio Linda, California topographic quadrangle map, 1967, Photo revised 1980.
 2. McLaren/Hart, Inc., *Phase I Environmental Site Assessment Fong Ranch*, submitted to Opus West Corporation, September 27, 1999, page 6.

of the Natomas Airport, an abandoned former crop dusting runway that is no longer in operation and is located approximately 3,000 feet to the west of the project site. Groundwater underlying the Natomas Airport is reportedly contaminated with pesticides and herbicides (Toxaphene, DDT, Endosulfan, and Dieldrin) and fuel hydrocarbons (aviation gasoline), and is being investigated with oversight by the Central Valley Regional Water Quality Control Board (CVRWQCB). Although there is groundwater contamination at the Natomas Airport site, groundwater in the vicinity of the airport flows towards the west and south, away from the project site, and would not affect the groundwater quality at the project site.³

As part of the Phase I ESA, McLaren/Hart performed shallow soil sampling at the project site to determine whether historical agricultural activities, such as pesticide and herbicide application, had adversely affected the area. A total of four composite soil samples were collected from surface soil (soil within the upper 0.5 feet) from four areas (NW, NE, SW, and SE quadrants of the project site) throughout the project site and analyzed for organochlorine pesticides using EPA Analytical Method 8080. As shown on Table 7.6-1, the pesticides DDT and DDE were detected at concentrations significantly below corresponding EPA Region IX Preliminary Remedial Goals (PRGs) for an industrial land-use scenario (which would include retail/commercial uses). In addition, the detected concentrations of pesticides were also well below residential PRGs, and below the California Total Threshold Limit Concentration (TTLC) for toxicity.

Sample Location	DDT (ppb)	DDE (ppb)	DDD (ppb)
NW	18	8.7	< 3.3
NE	13	8.0	< 3.3
SW	15	7.1	< 3.3
SE	12	9.9	< 3.3
Industrial PRG	13,000	13,000	19,000
Residential PRG	1,700	1,700	2,400
TTLC	1,000 (Total DDT, DDE, DDD)		
Notes:	Sample results in parts per billion (ppb) or micrograms per kilogram ($\mu\text{g}/\text{kg}$). DDD was not detected above the laboratory's reporting limit of 3.3 ppb		
Source:	McLaren/Hart, Inc. (1999).		

Based on the results of the on-site soil sampling, the project site is not contaminated with significant amounts of pesticides or herbicides, which could commonly be associated with agricultural properties, and would impact human health or the environment. In addition, the Phase I ESA did not identify any evidence of recognized environmental conditions in connection with past or current uses of the project site, or any adjacent properties, that would be of an environmental concern.⁴

3 McLaren/Hart, Inc., *Phase I Environmental Site Assessment Fong Ranch*, submitted to Opus West Corporation, September 27, 1999, page 18.

4 McLaren/Hart, Inc., *Phase I Environmental Site Assessment Fong Ranch*, submitted to Opus West Corporation, September 27, 1999, page 18.

Adjacent Property Uses and Environmental Conditions

The properties located immediately adjacent to the project site include a mixture of commercial warehouses, office complexes, and the Natomas Marketplace shopping center, as well as Interstate-80, which acts as the southern boundary of the project site. A Shell gasoline station is located due west (and down-gradient with regards to groundwater flow) of the project site in the Natomas Marketplace, but the Shell station is not known to have any contamination associated with its underground fuel tanks, based on the Phase I ESA's environmental regulatory database survey.

REGULATORY CONTEXT

A number of federal, State, and local laws have been enacted to regulate the management of hazardous materials and wastes. Implementation of these laws and the management of hazardous materials are regulated independently of the CEQA process through programs administered by various agencies at the federal, State, and local levels. An overview of the key hazardous materials laws and regulations that apply to the Proposed Project and properties located adjacent to the Proposed Project is provided below.

Federal

The management of hazardous materials and hazardous wastes in the City of Sacramento, as they relate to public safety and environmental protection, occurs within the context of a complex interaction of federal, State, and local requirements. The primary federal agencies with responsibility for hazardous materials management include the EPA, U.S. Department of Labor Occupational Safety and Health Administration (OSHA), and the U.S. Department of Transportation (DOT). Federal laws governing the transport, storage, and use of hazardous materials at the Proposed Project include the following:

- Resources Conservation and Recovery Act (RCRA) - hazardous waste management;
- Hazardous and Solid Waste Amendments Act (HSWA) - hazardous waste management;
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - cleanup of contamination;
- Superfund Amendments and Reauthorization Act (SARA) - cleanup of contamination;
- Emergency Planning and Community Right-to-Know (SARA Title III) – business inventories and emergency response planning;
- Toxic Substances Control Act (TSCA) – tracks and screens industrial chemicals; and
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) – controls pesticide distribution, sale, and use.

Specific requirements for implementation of these statutes are codified in Title 40 of the Code of Federal Regulations (CFR). Additional regulations that apply to workplace safety and transportation of hazardous materials are contained in CFR Titles 29 and 49, respectively.

State

Hazardous Materials Management

The California Environmental Protection Agency (Cal/EPA) has established regulations governing the use of hazardous materials in the State. Within Cal/EPA, the Department of Toxic Substance Control (DTSC) has primary hazardous materials regulatory responsibility, but can delegate enforcement responsibilities to local jurisdictions that enter into agreements with DTSC, for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law (HWCL). State regulations applicable to hazardous materials are contained primarily in Title 22 of the California Code of Regulations (CCR). Title 26 of the CCR is a compilation of those chapters or titles of the CCR that are applicable to hazardous materials management.

Also within the "umbrella" of Cal/EPA, the California Integrated Waste Management Board (IWMB) is responsible for protecting the public's health and safety and the environment through management of the solid waste generated in California. Solid waste regulations are generally enforced through local enforcement agencies (usually county agencies). The IWMB works in partnership with local government, industry, and the public to reduce waste disposal and ensure environmentally safe landfills. Solid waste management provisions are outlined in the Public Resources Code, Division 30.

The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. The California Department of Industrial Relations, Division of Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing work place safety regulations within the State. Cal/OSHA standards are more stringent than federal OSHA regulations, and are presented in Title 8 of the CCR.

The California Office of Emergency Services (Cal/OES) is the state office responsible for establishing emergency response and spill notification plans related to hazardous materials accidents. In addition, Cal/OES regulates businesses by requiring specific businesses to prepare an inventory of hazardous materials, and to prepare risk management plans through the California Accidental Release Prevention Program (Title 19 of the CCR).

The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB) regulate surface and groundwater quality according to the provisions of State and federal legislation including the Porter-Cologne Water Quality Act, the Toxic Pits Cleanup Act, Underground Tank Law, and Clean Water Act. Generally, all petroleum-related sites are handled by the RWQCB and all underground tank sites are managed by county environmental management agencies. The project site is located within the jurisdiction of the Central Valley RWQCB (Region 5). The RWQCB can delegate responsibilities, such as underground tank permitting and monitoring, to local jurisdictions, such as the City of Sacramento or Sacramento County.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

In January 1996, Cal/EPA adopted regulations implementing a "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program). The six program

elements of the Unified Program are hazardous waste generators and hazardous waste on-site treatment, underground storage tanks, above-ground storage tanks, hazardous material release response plans and inventories, risk management and prevention programs, and Unified Fire Code hazardous materials management plans and inventories. The Unified Program is implemented at the local level by a local agency - the Certified Unified Program Agency (CUPA). The CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction. The Sacramento County Environmental Management Department is the designated CUPA in the City of Sacramento.

California Accidental Release Prevention Program

The purpose of the California Accidental Release Prevention (CalARP) program (CCR Title 19, Division 2, Chapter 4.5) is to prevent the accidental release of regulated substances. The CalARP program covers certain businesses that store or handle more than a certain volume of specific regulated substances at their facilities. The list of regulated substances is found in Article 8, Section 2770.5 of the CalARP program regulations. The businesses that use a regulated substance above the noted threshold quantity must implement an accidental release prevention program, and some may be required to complete a Risk Management Plan (RMP).

RMPs are a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. The purpose of an RMP is to decrease the risk of an off-site release of a regulated substance that might harm the surrounding environment and community. An RMP includes the following components: safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation. The RMP must consider the proximity to sensitive populations located in schools, residential areas, general acute care hospitals, long-term health care facilities, and child day-care facilities, and must also consider external events such as seismic activity.

The CalARP program regulations became effective on January 1, 1997, and include the provisions of the federal Accidental Release Prevention program (Title 40, CFR Part 68) with certain additions specific to the State pursuant to Article 2, Chapter 6.95, of the Health and Safety Code. Although Cal/OES is responsible for implementing the provisions of the CalARP program, in most cases, local governments will have the lead role for working directly with business in this program. Local government implementing agencies will be represented by the CUPA or Administering Agencies. Most of the information in RMPs would be available to the public.

Local

Sacramento County Hazardous Materials Management

The Sacramento County Environmental Management Department (SCEMD) protects public health and the environment by ensuring compliance with environmental regulations. At the City level, hazards and hazardous materials are managed by the Sacramento City Fire Department, which responds to any and all hazardous materials incidents within the City and County of Sacramento.

City of Sacramento General Plan

The following goals and policies from the City of Sacramento General Plan are applicable to the Proposed Project:

Section 8, Health and Safety Element, Hazardous Materials

Goal A: Provide for the health and safety of the citizens of Sacramento and for the protection of the environment by reducing, and where possible eliminating, exposure to hazardous materials and waste.

Policies:

1. Work with the County, State, federal agencies, and responsible parties to identify, contain, and clean up sites that contain hazardous materials.
3. Encourage "clean industry" to operate in the City of Sacramento.
4. Implement a Toxic Substance Management Plan with coordinated responsibilities with other agencies for regulating and controlling hazardous materials within the City.
6. Coordinate with Sacramento County, the State and federal governments to ensure compatibility among plans, programs, regulations and safeguards.

North Natomas Community Plan

The NNCP has community-wide environmental standards that directly relate to hazards and hazardous materials.⁵ The requirements of the Community Plan include the following:

- **Phase I Toxic Soils Study:** A Phase I Toxic Soils Study shall be completed prior to approval of any development plans. The level of thiobencarb (Bolero) in the surface soil should be assessed to determine if levels are acceptable to State agencies.
- **Hazardous Substances Management Plan:** Industries that use solvents and other toxics are required to prepare a Hazardous Substances Management Plan. These plans need to show that adequate safety precautions have been taken for the storage and handling of materials and/or wastes, including: 1) proper on-site management; 2) proper transportation; 3) properly designed and outfitted disposal facilities; 4) source reduction and recovery; 5) measures to prevent hazardous waste from entering sanitary sewers; and 6) programs to reduce toxic spills during transport.
- **Storage Facility Design:** Design of hazardous substance facilities are regulated by the Uniform Building Code (UBC) and storage and use of flammable and combustible liquids, including regulations for service stations, are regulated by the Uniform Fire Code (UFC). Also, UFC regulates drainage, spill control, and containment of hazardous materials for industries. Fueling stations are also regulated by City Ordinance and County Code, which regulate the underground storage of hazardous substances.
- **Safety Zones:** To reduce the potential exposure of residential, public, and open space areas to hazardous substances, contain the disposal of toxins to safety zones. The size of these safety zones shall be determined based on the type of industry, the proposed chemicals to be handled, and the nature and proximity of adjacent land uses.

5 North Natomas Community Plan, City of Sacramento, May 3, 1994, pg. 83.

IMPACTS AND MITIGATION MEASURES

Method of Analysis

The qualitative analysis of the potential public safety and hazards impacts identified above is based on issues raised during the NOP process, a site visit conducted on January 3, 2001, existing conditions reported by the Proposed Project's environmental and hydrological consultants, and review of the project applicant's proposed site design and intended uses. As previously noted, the sources reviewed for this section include the following documents: *City of Sacramento General Plan Draft EIR* (1987); *City of Sacramento General Plan* (1988); *North Natomas Community Plan* (1994); *Phase I Environmental Site Assessment-Fong Ranch* (McLaren/Hart, 1999). The information obtained from these sources was reviewed and summarized to establish existing conditions and to identify potential environmental effects, based on the standards of significance presented in this section. In determining the level of significance, the analysis assumes that the Proposed Project would comply with applicable ordinances and regulations.

Standards of Significance

For purposes of this EIR, an impact is considered significant if the Proposed Project or Alternatives would:

- Involve the use, production, or disposal of materials that pose a hazard to people, or to animal or plant populations in the area affected;
- Create a substantial potential public health or safety hazard due to risk of upset (accidents);
- Violate applicable laws intended to protect human health and safety; or
- Interfere with emergency response plans or emergency evacuation plans.

Impacts and Mitigation Measures

Impact

7.6-1 Creation of health hazards. (Project-specific)

A Phase I ESA was performed at the project site by McLaren/Hart in 1999 (Appendix H) and did not identify any hazardous materials release sites located within a one-mile radius of the project site, with the exception of the Natomas Airport, which is located approximately 3,000 feet west of the project site. Although groundwater contamination was reported at the Natomas Airport, groundwater in the vicinity of the airport was determined to flow towards the west and south, away from the project site. Because groundwater contamination at the Natomas Airport site is flowing away from the project site, it would not affect the quality of groundwater underlying the project site and would not present a potential health hazard.

As part of the Phase I ESA, shallow soil sampling was performed at the project site to determine whether historical agricultural activities, such as pesticide and herbicide application, had adversely impacted soil at the project site. As previously indicated on Table 7.6-1, the identified pesticides were detected at concentrations significantly below remedial levels for industrial and residential land uses, and were also well below the California threshold for toxicity. Therefore, the soil at the project site does not appear to be contaminated with pesticides or herbicides that could affect human health or the environment. In addition, the Phase I ESA did not identify any evidence of environmental conditions from any adjacent properties that would be a health or safety concern for people at the project site.

It is possible that not all environmental conditions have been reported or identified at the project site, such as buried disposal sites, trash pits, or other underground storage devices. The presence of any of these, either on or adjacent to the project site, could generate conditions that could be a hazard to public health and the environment. Under the Proposed Project, unearthing of any of the aforementioned unknown/potential sites could generate toxic or flammable conditions that could present immediately dangerous situations. The unknown presence and potential discovery of unknown hazards during site preparation and construction (excavation and grading) of the Proposed Project is considered a *potentially significant impact*.

Mitigation

7.6-1 Creation of health hazards. (Project-specific)

Implementation of the following mitigation measures would reduce the magnitude of this impact for the Proposed Project to a *less-than-significant level*.

- 7.6-1 (a) *If a Phase I Environmental Site Assessment (ESA) has not been prepared for the entire project site, one shall be prepared in conformance with American Society of Testing and Materials (ASTM) standards prior to any site disturbing activities associated with the Proposed Project. If a Phase I ESA has been prepared for a site, but the physical condition of the site or its adjacent properties has substantially changed (i.e., new development), the original Phase I ESA shall be updated by an environmental professional to ensure that the environmental liability associated with the project site has not changed.*

If the Phase I ESA concludes there is a potential for adverse site conditions to exist at the project site, soil and/or groundwater samples shall be collected by an environmental professional and analyzed for the appropriate contaminants. If the results of the analytical tests indicate contaminant levels that exceed remedial goals, or are above health and safety levels determined to be acceptable by the State for a specific land use, an environmental professional shall contact the Sacramento County Environmental Management District (SCEMD), or the appropriate regulatory agency, for guidance regarding site remediation. The project applicant shall initiate the recommendations of the regulatory agency to ensure that health and safety hazards do not exist.

- (b) *If, during construction activities, evidence of hazardous materials contamination is observed or suspected through either obvious or implied measures (i.e., stained or odorous soil, or oil or discolored water), construction activities shall cease in the affected area. An environmental professional shall assess the situation and make appropriate recommendations.*

*Impact***7.6-2 Safety hazards during construction. (Project-specific)**

Hazardous materials would be used in varying amounts during construction activities at the project site. Construction and equipment maintenance activities would use hazardous materials, such as: fuels (gasoline and diesel); oils and lubricants; paints and paint thinners; glues; cleaners (which could include solvents and corrosives in addition to soaps and detergents); and pesticides and herbicides. However, consistent with federal, State, and local laws and regulations addressing hazardous materials management and environmental protection, construction specifications would include the following requirements in compliance with applicable regulations and codes, including, but not limited to Titles 8 and 22 of the Code of California Regulations, Uniform Fire Code, and Division 20 of the California Health and Safety Code: all reserve fuel supplies and hazardous materials must be stored within the confines of a designated construction area; equipment refueling and maintenance must take place only within the staging area; construction vehicles shall be inspected daily for leaks; and a Spill Prevention Countermeasure and Control (SPCC) plan shall be prepared and implemented. In addition, all transportation of hazardous materials to and from the site must comply with DOT and Caltrans regulations.

The types and amounts of hazardous materials used during construction of the Proposed Project would vary according to the nature of the activity; therefore, the specific hazardous materials and amounts that would be on site or transported cannot be determined at this time. In some cases, it is the *type* of hazardous material that is potentially hazardous; in others, it is the *amount* of hazardous material that could present a hazard. In any case, because development that would occur as a result of the Proposed Project would be required to comply with all federal, State, and local laws and regulations governing the use, storage, transportation, and disposal of hazardous materials during construction of the proposed UCP, this impact is considered *less than significant*.

*Mitigation***7.6-2 Safety hazards during construction. (Project-specific)**

No mitigation would be required for the Proposed Project.

*Impact***7.6-3 Safety hazards. (Project-specific)**

Nearly all of the land uses at the project site, involving the Proposed Project, would involve some level of use or storage of hazardous materials. In each case, the potential hazards would depend on what materials would be used, where the materials would be used, how they would be used, and who would use them. Retail and office-based businesses, such as those proposed for the project site, would generally use relatively small quantities of household-related hazardous materials when compared to other businesses, such as those engaged in manufacturing, research and development, light manufacturing, or automotive repair (service stations).

Businesses that handle larger quantities of hazardous materials would often also use a wider variety of materials, which could include less common materials and acutely hazardous materials.

Businesses that handle larger quantities of hazardous materials and acutely hazardous materials would also be subject to more regulation and oversight than businesses that handle smaller quantities of more common materials. In addition, employees of businesses that handle large quantities of hazardous materials would also typically receive special training (often required by law under OSHA) to help them understand the potential hazards they could encounter in the workplace.

Although individual businesses use relatively small volumes of hazardous materials, the total volume of the hazardous materials managed by all of the businesses at the project site could be substantial, which would increase the opportunities for accidents and improper use, storage, and disposal. Because many hazardous materials are consumed through their use (i.e., fuel, paint, aerosols), the quantity of hazardous materials handled and stored would be greater than the volume of hazardous waste generated. In any case, the SCEMD has a hazardous waste collection program that safely collects, transports, and disposes of residual hazardous wastes, and commercial products are labeled to inform users of potential risks and to instruct users in appropriate handling procedures. The use of common hazardous materials is typically considered to pose an acceptable level of risk.

The SCEMD, as the local CUPA for the Proposed Project, oversees federal and State hazardous materials registrations, underground storage tank programs, aboveground petroleum storage tank spill prevention control and countermeasure plans, risk management plans, and some fire safety planning. Additionally, businesses are regulated as employers by Cal/OSHA and are therefore required to ensure employee safety. Specific requirements include identifying hazardous materials in the workplace, providing safety information to workers that handle hazardous materials, and adequately training workers. Because of this regulatory structure, the business-related use of relatively small quantities of hazardous materials similar to household products would not pose greater risks than the use of such materials by households. For this reason, the use of relatively small quantities of common hazardous materials by businesses would not create substantial public health hazards.

In addition, if businesses at the project site were to use relatively large quantities of hazardous materials (in comparison to office-based businesses) they could be subject to the requirements of the CalARP program. If properly managed (as is assumed and required by the Division of Environmental Health and State law), hazardous chemicals would generally pose minimal health and safety risks at the project site. Also, any facilities operating on the project site that use hazardous materials would be subject to the Hazardous Substance Management requirements presented in the North Natomas Community Plan, which include siting criteria, the preparation of a Hazardous Substance Management Plan, and hazardous material storage facility design. Because of the existing regulatory structure, the potential effect of this impact is considered *less than significant*.

Mitigation

7.6-3 Safety hazards. (Project-specific)

No mitigation would be required for the Proposed Project.

Impact

7.6-4 Interference with an emergency response or evacuation plan. (Project-specific)

The project site is located along the north side of I-80 near the intersection of Truxel Road and Gateway Boulevard. Currently, the project site is undeveloped and used for agriculture. No roads exist on the project site. As noted in Section 7.2, Transportation and Circulations, the roadways leading to and from the project site would allow for emergency response vehicles to easily access the project site, as well as the adjacent properties, if an emergency were to occur, be it fire, hazardous material spill, or some other type of safety-related catastrophe. Development of the Proposed Project would improve emergency response capabilities by including roadway and street access into the interior of the project site. All of the interior roadways would be designed to meet City standards to ensure there would be no interference with any emergency response or evacuation plans.

Because the project site is undeveloped and is used for agriculture, there is no evacuation plan in operation at the project site. The Proposed Project would include construction of roadways that link to the surrounding area, so upon development of the project site, should an emergency occur, people and vehicles would be able to leave the site. In addition, the proposed roadways would not block or substantially change adjacent properties' transportation routes, so evacuation from those properties would not be altered.

Because the Proposed Project would not interfere with emergency response or evacuation plans, this is considered to be a *less-than-significant impact*.

Mitigation

7.6-4 Interference with an emergency response or evacuation plan. (Project-specific)

No mitigation would be required for the Proposed Project

Impact

7.6-5 Increase in hazardous materials use, storage, and transportation. (Cumulative)

The cumulative context for hazardous materials-related impacts is the area within the boundaries of the City of Sacramento General Plan. As discussed in Impacts 7.6-2 and 7.6-3, construction and occupancy of the buildings associated with the Proposed Project would involve the transportation, use, and storage of various types and various amounts of hazardous materials, which would increase the frequency of hazardous material transport and the volume hazardous materials being transported. However, because of the existing federal, State, and local regulatory framework overseeing the use of hazardous materials, the effects on the cumulative context would be *less than significant*.

Mitigation

7.6-5 Increase in hazardous materials use, storage, and transportation. (Cumulative)

No mitigation would be required for the Proposed Project.

7.7 Hydrology and Water Quality



7.7 HYDROLOGY AND WATER QUALITY

INTRODUCTION

This section of the EIR evaluates the impacts of the Proposed Project on local and regional drainage, water quality, and flooding conditions. Comments received in response to the NOP (see Appendix C in Volume II of the Promenade at Natomas/Sacramento Auto Loop Project DEIR) addressed several site-specific issues regarding hydrology, water quality, and flooding. The comment letters identified the following concerns: stormwater runoff issues near I-80 and runoff contributing to contaminant loads, and on-site drainage issues. The Sacramento County Department of Water Resources responded to the NOP, but did not have specific comments or concerns related to hydrology or water quality. The California Regional Water Quality Control Board commented on the second NOP (September 4, 2002) and expressed concerns regarding jurisdictional Waters of the United States (wetlands), NPDES and Storm Water quality, site planning, erosion, chemicals, waste management, and post-construction pollutants.

The Initial Study prepared for the Proposed Project (see Appendix B in Volume II of the Promenade at Natomas/Sacramento Auto Loop Project DEIR) determined the following impacts to be less than significant: depletion of groundwater supplies, placement of residences within a 100-year flood hazard area, and inundation by seiche, tsunami, or mudflow. Therefore, these issues will not be discussed in this section. Issues pertaining to water supply are addressed in Section 7.5, Public Services and Utilities.

ENVIRONMENTAL SETTING

Regional Hydrology

The City of Sacramento is situated in the Central Valley at the confluence of the Sacramento River and the American River, one of the Sacramento River's principle tributaries. The Sacramento River originates in the Cascade and Trinity mountains in northern California and southern Oregon and drains the northern half of California's Central Valley. The American River originates in the Sierra Nevada west and south of Lake Tahoe and flows towards the west through Sacramento. The Sacramento River joins the San Joaquin River, which drains the southern half of the Central Valley, approximately 40 miles south of Sacramento in the Delta; together these rivers flow into the San Francisco Bay, and ultimately into the Pacific Ocean.¹

The entire Central Valley is underlain by a vast thickness of alluvium, which was derived from surrounding mountains, transported by creeks and streams, and deposited in shallow seas or river floodplains. This alluvium is now saturated below a relatively shallow depth; thus, the sedimentary

1 City of Sacramento General Plan Update EIR, 1987, p. W-1.

layers underlying the Sacramento area are part of a major aquifer system that extends throughout the Central Valley from Red Bluff in the north to Bakersfield in the south.²

The geologic formations that constitute the water-bearing deposits underlying the Sacramento area consist of an upper aquifer that is hydraulically isolated from a lower aquifer consisting principally of the Mehrten Formation, which is a major source of groundwater. The Mehrten Formation consists of 200 to 1,200 feet of volcanic sands, interbedded clay, and hard, dense layers of volcanic rock containing numerous buried channels consisting of coarse-grained river sands and gravels.³

Site-Specific Conditions

The project site has previously been used for agriculture and is surrounded by properties that have recently been developed with various commercial uses, such as shopping centers, offices, and storage warehouses. The topography of the project site is flat, with elevations throughout the site constant at approximately 9 to 10 feet above mean sea level (msl). Although the site itself is flat, the regional surface gradient slopes gently towards the west and southwest in the general direction of the Sacramento River.

Drainage

The nearest major surface water body is the Sacramento River located approximately three miles west of the project site. The East Drainage Canal is located approximately 1,500 feet west (down-gradient) of the project site, and the East Main Drainage Canal is located east of the project site (up-gradient) on the eastside of Northgate Boulevard. The project site is located in a drainage basin ultimately tributary to the Sacramento River, and is under jurisdiction of Reclamation District (RD) 1000.

The project site is generally underlain by poorly drained soils that maintain a high groundwater table. Due to the near-surface impervious clayey nature of the soils and the site's flat topography, rainwater tends to pond on-site when the underlying soils become saturated. The project site is surrounded by a slight earthen berm, so no stormwater runoff enters the project site from outside the property.⁴ The berm located around the project site has created a shallow channel along the west and south side of the project site; however, this channel collects only localized drainage from the project site, which infiltrates into the ground or evaporates. At the time of the site visit by EIP on January 3, 2001, no standing water was visible in the shallow channel to the south, and the western boundary of the project site where the west channel is located was completely covered with Himalayan blackberry bushes.

Between the project site and I-80 is a drainage canal approximately 3 to 4 feet deep operated and maintained by RD 1000. The RD 1000 canal runs parallel to the southern boundary of the project site. As discussed in Impact 7.7-1, below, the drainage system engineered for the Proposed Project would discharge surface water runoff into the RD 1000 canal. The adjacent RD 1000 canal

2 City of Sacramento General Plan Update EIR, 1987, p. W-1.

3 City of Sacramento General Plan Update EIR, 1987, p. W-9.

4 Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, p.1.

discharges into the East Drainage Canal, which discharges into the Natomas Main Drainage Canal, which discharges directly into the Sacramento River.

Water Quality

The adjacent RD 1000 canal collects surface water runoff from urban and agricultural properties upstream in northern Sacramento County and southern Sutter County. The water in the adjacent RD 1000 canal is expected to contain some amounts of urban and agricultural pollutants, such as oil and grease, coliform bacteria, petroleum hydrocarbons (gasoline and diesel fuel), heavy metals such as lead, copper and zinc, suspended solids, nitrates, and pesticides and herbicides. No water quality samples have been collected in the adjacent RD 1000 canal as part of the Proposed Project.

Groundwater

Groundwater at the project site is generally first encountered at a depth of 15 to 20 feet below ground surface; however, due to the presence of a clay layer near the surface, soils at the project site often become saturated during the rainy winter months and tend to pond on top of the clay layer. During this time, groundwater may be encountered from the surface to a few feet below ground surface. The flow direction of groundwater is generally west to southwest.⁵

Groundwater Quality

Water quality samples have not been collected at the project site. However, as part of a Phase I Environmental Site Assessment (ESA) prepared for the project site, a survey of federal, State, and local environmental regulatory databases was performed. No hazardous material release sites were identified within a one-mile radius of the project site, with the exception of the Natomas Airport, which is located approximately 3,000 feet to the west of the project site. The Natomas Airport appears to be an abandoned farmer crop dusting runway, and is no longer in operation. Groundwater underlying the Natomas Airport is reportedly contaminated with pesticides and herbicides (toxaphene, DDT, endosulfan, and dieldrin) and fuel hydrocarbons (aviation gasoline), and is being investigated with oversight by the Central Valley Regional Water Quality Control Board (CVRWQCB). Although there is groundwater contamination at the Natomas Airport site, groundwater in the vicinity of the airport flows towards the west and south, away from the project site, and would not affect the project site uses. Soil samples collected at the project site in conjunction with the Phase I ESA did not detect significant amounts of pesticides or herbicides, which could commonly be associated with past agricultural uses, such as those practiced historically on the project site.⁶

REGULATORY CONTEXT

The following is a summary of the regulatory context under which issues associated with water quality, drainage, and on-site and off-site flooding is managed at the federal, State, and local level.

5 McLaren/Hart, Inc., *Phase I Environmental Site Assessment Fong Ranch*, submitted to Opus West Corporation, September 27, 1999.

6 McLaren/Hart, Inc., *Phase I Environmental Site Assessment Fong Ranch*, submitted to Opus West Corporation, September 27, 1999.

Federal and State

Water Quality

Section 303 of the federal Clean Water Act (CWA) requires states to adopt water quality standards for all surface water of the United States. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB) are responsible for ensuring implementation and compliance with the provisions of the federal CWA and California's Porter-Cologne Water Quality Control Act. Along with the SWRCB and RWQCBs, water quality protection is the responsibility of numerous water supply and wastewater management agencies, as well as city and county governments, and requires the coordinated efforts of these various entities.

The project site is situated within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB) (Region 5). The CVRWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction. Water quality objectives for the Sacramento River and its tributaries are specified in *The Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin* (Basin Plan) prepared by the CVRWQCB in compliance with the federal CWA and the State Porter-Cologne Water Quality Control Act.⁷ The Basin Plan establishes water quality objectives, and implementation programs to meet stated objectives and to protect the beneficial uses of water in the Sacramento-San Joaquin River Basin. Because the City of Sacramento and the project site is located within the CVRWQCB's jurisdiction, all discharges to surface water or groundwater are subject to the Basin Plan requirements.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit system was established in the CWA to regulate municipal and industrial stormwater discharges to surface waters of the U.S. Each Municipal NPDES permit is required to contain receiving water limitation for stormwater discharges. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that federal EPA must consider in setting effluent limits for priority pollutants.

The Proposed Project would be required to comply with the City's Municipal Stormwater Permit program. The City has developed a comprehensive stormwater quality management program, which would apply to the Proposed Project. Specific source-control measures for various activities, such as commercial uses, are included in the City of Sacramento Stormwater Management Program's *Guidance Manual for On-Site Stormwater Quality Control Measures* (January 2000), which is discussed in greater detail under the "Local" subheading, below. Stormwater discharges caused by general construction activities and the general quality of stormwater in municipal stormwater systems (either as part of a combined system or as a separate system in which runoff is carried through a developed

7 California Regional Water Quality Control Board, Central Valley Region, *The Water Quality Control Plan (Basin Plan) [for] the Sacramento River Basin and the San Joaquin River Basin*, 4th Edition, 1998.

conveyance system to specific discharge locations) are subject to NPDES Permits. The goal of the NPDES Stormwater regulations is to improve the quality of stormwater discharged to receiving waters to the "maximum extent practicable" through the use of structural and non-structural Best Management Practices (BMPs). BMPs can include the development and implementation of various practices including educational measures (workshops informing public of what impacts results when household chemicals are dumped into storm drains), regulatory measures (local authority of drainage facility design), public policy measures (label storm drain inlets as to impacts of dumping on receiving waters) and structural measures (filter strips, grass swales and detention ponds).

Construction Site Runoff Management

In accordance with NPDES regulations, to minimize the potential effects of construction runoff on receiving water quality, the State requires that any construction activity affecting one acre or more must obtain a General Construction Activity Stormwater Permit (General Permit). The first General Permit was issued in 1992. The SWRCB adopted a revised General Permit in August 1999. Performance standards for obtaining and complying with the General Permit are described in NPDES General Permit No. CAS000002, Waste Discharge Requirements, Order No. 99-08-DWQ. Under the 1999 General Permit, all construction activity, including small construction sites (one to five acres) as well as sites under five acres that are part of a larger common plan must obtain a General Permit. The General Permit was modified in April 2001 (SWRCB Resolution No. 2001-046) to require permittees to implement specific sampling and analytical procedures to determine whether the BMPs used at the construction site are effective. Because construction of the Proposed Project would disturb more than one acre, the project would be subject to the General Permit requirements.

General Permit applicants are required to submit a Notice of Intent (NOI), develop and implement a Stormwater Pollution Prevention Plan (SWPPP), eliminate or reduce non-stormwater discharges, and perform inspections of all BMPs. Examples of typical construction BMPs include, but are not limited to: erosion control BMPs such as mulch, hydroseeding, geotextiles and mats, and soil binders; sediment control BMPs such as silt fences, fiber rolls, gravel bags and storm drain inlet protection; and housekeeping practices such as stabilized construction entrances, vehicle fueling, spill prevention and control, and management of solid waste, concrete, paint, etc.

Construction Dewatering

Clean or relatively pollutant-free wastewater that poses little or no threat to water quality may be discharged directly to surface water under certain conditions. In addition to the State General Construction Activity Permit, the CVRWQCB has also adopted a general NPDES permit for short-term discharges of small volumes of wastewater from certain construction-related activities. Permit conditions for the discharge of these types of wastewaters to surface water are specified in Waste Discharge Requirements (WDR) General Order for Dewatering and Other Low-Threat Discharges to Surface Waters. Discharges may be covered by the permit provided they are (1) either four months or less in duration, or (2) the average dry weather discharge does not exceed 0.25 million gallons per day. Construction dewatering, well development water, pump/well testing, and miscellaneous dewatering/low-threat discharges are among the types of discharges that may be covered by the permit. The general permit also specifies standards for testing, monitoring, and reporting receiving water limitations and discharge prohibitions.

Local

City of Sacramento

Construction Element

The City of Sacramento has adopted a Grading Ordinance (Chapter 15.88 of the City Code) that regulates grading on property within the City limits. The ordinance identifies procedures for controlling land disturbance, soil storage, pollution, and erosion and sedimentation during construction. Measures implemented through the Grading Ordinance are intended to, among other actions: avoid pollution of waterways with nutrients, sediments, or other materials carried in construction site runoff, and comply with the City's NPDES permit CA0082597. The City's grading ordinance requires a grading permit be obtained and an Erosion and Sediment Control Plan (ESC Plan) be prepared in accordance with the Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control. The ESC Plan should include erosion control BMPs, sediment control BMPs and housekeeping practices to be implemented during construction.

Development Element

The City of Sacramento has adopted Stormwater Management and Discharge Control (Chapter 13.16 of the Sacramento City Code), to control non-stormwater discharges to the stormwater conveyance system from spills, dumping, or disposal of materials other than stormwater, and by reducing pollutants in urban stormwater discharges to the maximum extent practicable. Chapter 13.16 is intended to assist in the protection and enhancement of the water quality of watercourses, water bodies, and wetlands in a manner pursuant and consistent with the Federal Water Pollution Control Act (Clean Water Act, 33 USC Section 1251 et seq.), Porter-Cologne Water Quality Control Act, and NPDES Permit No. CA0082597, as such permit is amended and/or renewed. The Stormwater Ordinance requires new development projects to incorporate controls, as appropriate, to minimize the long-term, post construction discharge of stormwater pollutants. Controls may include source control measures to prevent pollution of stormwater and/or treatment controls designed to remove pollutants from stormwater as outlined in the City's *Manual for On-Site Stormwater Quality Control Measures*.

Sacramento Stormwater Management Program

The City of Sacramento's Comprehensive Stormwater Management Program regulates discharges under the City's NPDES permit. The Stormwater Management Program includes programs for construction, new development, industrial discharge management, illegal discharges, illicit connections, public education and outreach, municipal operations, target pollutant reduction strategies, monitoring of stormwater impacts and program effectiveness. In addition to providing regulator guidance, the Stormwater Management Program publishes various stormwater manuals that should be used in the preparation and implementation of Erosion and Sedimentation Control Plans programs and design of post construction BMPs. The manuals published by the Stormwater Management Program include the following:

- The *City of Sacramento Stormwater Quality Improvement Plan, July 2003*, outlines the priorities and activities of the City's Stormwater Management Program for 2003-2008.

- *The Guidance Manual for On-Site Stormwater Quality Control Measures* provides design criteria for permanent, long-term control measures to reduce stormwater pollution from development projects.
- *The Administrative and Technical Procedures Manual for Grading and Erosion Control and Sediment Control* manual provides guidance for obtaining grading approval and for designing and preparing erosion, sediment and pollutant control plans.
- The *Department of Utilities Procedures Manual*, Section 11.6, Regional Water Quality Control, contains the criteria to be used when designing the regional water quality features of a new drainage system.⁸
- The *Investigation of Structural Control Measures for New Development – November 1999* report contains information on the performance of selected structural controls for the treatment of stormwater runoff.

North Natomas Community Plan

The NNCP required the development of a comprehensive drainage plan (CDP) for North Natomas, which must be consistent with other jurisdictions' drainage and/or flood control plans within the Natomas Basin.⁹ A CDP was developed and included a working hydrological model that conforms to the methodology set forth by the City of Sacramento, and conforms to the design standards listed in the NNCP.

The CDP identified the types and locations of improvements needed for RD 1000 facilities to accommodate flows from North Natomas Community Plan development. The CDP improvements were designed to detain surface runoff from urban development before releasing it slowly and in a controlled manner to the Sacramento River, which would help lower water levels in the river that would, in turn, reduce the potential for flooding.¹⁰ In conjunction with those efforts, the City of Sacramento and RD 1000 established various agreements that address development-generated stormwater discharges to RD 1000 facilities. Criteria for managing stormwater flows and runoff water quality are specified in the agreements. These criteria are applicable to the Proposed Project.¹¹

The potential hydrologic and hydraulic and water quality effects associated with development in the NNCP area and the effectiveness of the CDP in reducing potential drainage and flooding effects were evaluated in the certified EIR for the CDP (*North Natomas Comprehensive Drainage Plan EIR*, December 1996, SCH #96042030). The hydrologic and hydraulic models in the EIR assumed development of areas that would use RD 1000 facilities, including the project site.¹²

Reclamation District 1000

RD 1000 operates a series of canals and pump stations that provide drainage for northwestern Sacramento County and southern Sutter County. Irrigation return flows and storm drainage flows

8 Information viewed on March 5, 2002, from the City of Sacramento Stormwater Management Program's internet site at: <http://www.sacstormwater.org/const/manuals/index.html>

9 North Natomas Community Plan, City of Sacramento, May 3, 1994, pp. 68-72 and 76-77.

10 City of Sacramento, Draft Supplement to the North Natomas Community Plan EIR (SCH #93012011), March 1993, pp.4.7-11 and 4.7-14.

11 Patrick Stiehr, Watermark Engineering, Inc., personal communication, October 16, 2002.

12 Patrick Stiehr, Watermark Engineering, Inc., personal communication, October 16, 2002.

are eventually discharged to the Sacramento River through the Natomas East Main Drainage Canal or by pumping from the Natomas Main Drainage Canal. The City of Sacramento and RD1000 have established agreements that limit stormwater discharges to RD1000 from North Natomas development to 0.1 cubic feet per second (cfs) per acre. This limit was established to ensure that runoff from development does not exceed the capacity of the RD1000 system and to minimize the potential for downstream flooding as a result of increased flows from increased urbanization. Design standards for achieving these flows, and the hydrologic and hydraulic modeling that supports Proposed Project design, are also established in the agreements, along with water quality protection requirements. The drainage improvements to the RD 1000 facilities required to serve additional urban development are financed through development fees.

Development within North Natomas has generally been restricted to a pumping rate of 0.1 cubic feet per second (cfs) per acre. However, fees were paid for Parcel 225-160-10 (the project site) to be included in the Northgate Pumping Plant Assessment District Improvements program.¹³ By participating in this district program, the maximum pumping rate from the project site into RD 1000 facilities is approximately 0.4 cfs per acre, or a maximum of 50.5 cfs from the project site, based on 126 acres.

IMPACTS AND MITIGATION MEASURES

Method of Analysis

A Preliminary Drainage Master Plan (*Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch)*), Watermark Engineering, Inc., September 2002) was prepared for the Proposed Project to ensure that post-project runoff does not increase the potential for flooding on- or off-site. The North Natomas Design and Procedures Guidelines were used, as well as the City and County of Sacramento Hydrology Standards, to estimate peak flows and runoff volumes for the appropriate design storm. For the drainage analysis, the project site was divided into approximately 35 sub-basins, which generally correspond to all of the drain inlets that would be installed for the Proposed Project. The undeveloped project site, because of its flat topography, was considered one basin. The drainage study assumed the 100-year, 24-hour storm for the overland flow analysis. The 100-year, 10-day storm was used to determine maximum basin storage volume. The 10-year, 24-hour storm was used to analyze pipe capacities and design water levels, and the 2-year, 24-hour storm was used to establish pump settings. Water quality treatment was developed using the "Sato" storm¹⁴ and requirements in the North Natomas Design Standards for both dry-weather and wet-weather flows.¹⁵

The text of the Preliminary Drainage Master Plan, which includes additional information on specific hydrologic and hydraulic assumptions, is included in Appendix I. The entire report, including figures and drainage calculations included as appendices, is available for review at the City's Planning Department, 1231 I Street, Suite 300, Sacramento, California.

-
- 13 Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, p.1.
 - 14 A hydrologic model developed by J.F. Sato and Associates for estimating the amount of detention basin storage needed for water quality treatment. Used in Sacramento City/County stormwater management planning.
 - 15 Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, p.6.

Standards of Significance

For purposes of this EIR, a significant impact is identified if the Proposed Project or alternatives would:

- Substantially increase the rate or amount of runoff in a manner that would result in flooding on- or off-site;
- Create or contribute runoff that would exceed the capacity of existing or planned drainage systems; or
- Cause increases in sediment and other contaminants generated during construction or operation of the Proposed Project or alternatives that result in degraded surface water quality in violation of existing ambient water quality standards of the Sacramento-San Joaquin River Basin Plan adopted by the Regional Water Quality Control Board.

Impacts and Mitigation Measures

Impact

7.7-1 Increased stormwater runoff. (Project-specific)

The project site is currently undeveloped and has previously been used for agriculture. The topography of the project site is flat, and has an elevation between 9 and 10 feet above msl. Sheet runoff does not occur at the project site, and surface water runoff either evaporates into the atmosphere or infiltrates into the ground. Because the project site is underlain by poorly drained soils that maintain a generally high groundwater table, and due to the near-surface impervious clayey nature of the soils at the project site, rainwater tends to pond on-site when the underlying soils become saturated. The project site is also surrounded by a slight earthen berm, so surface water does not run onto the project site.

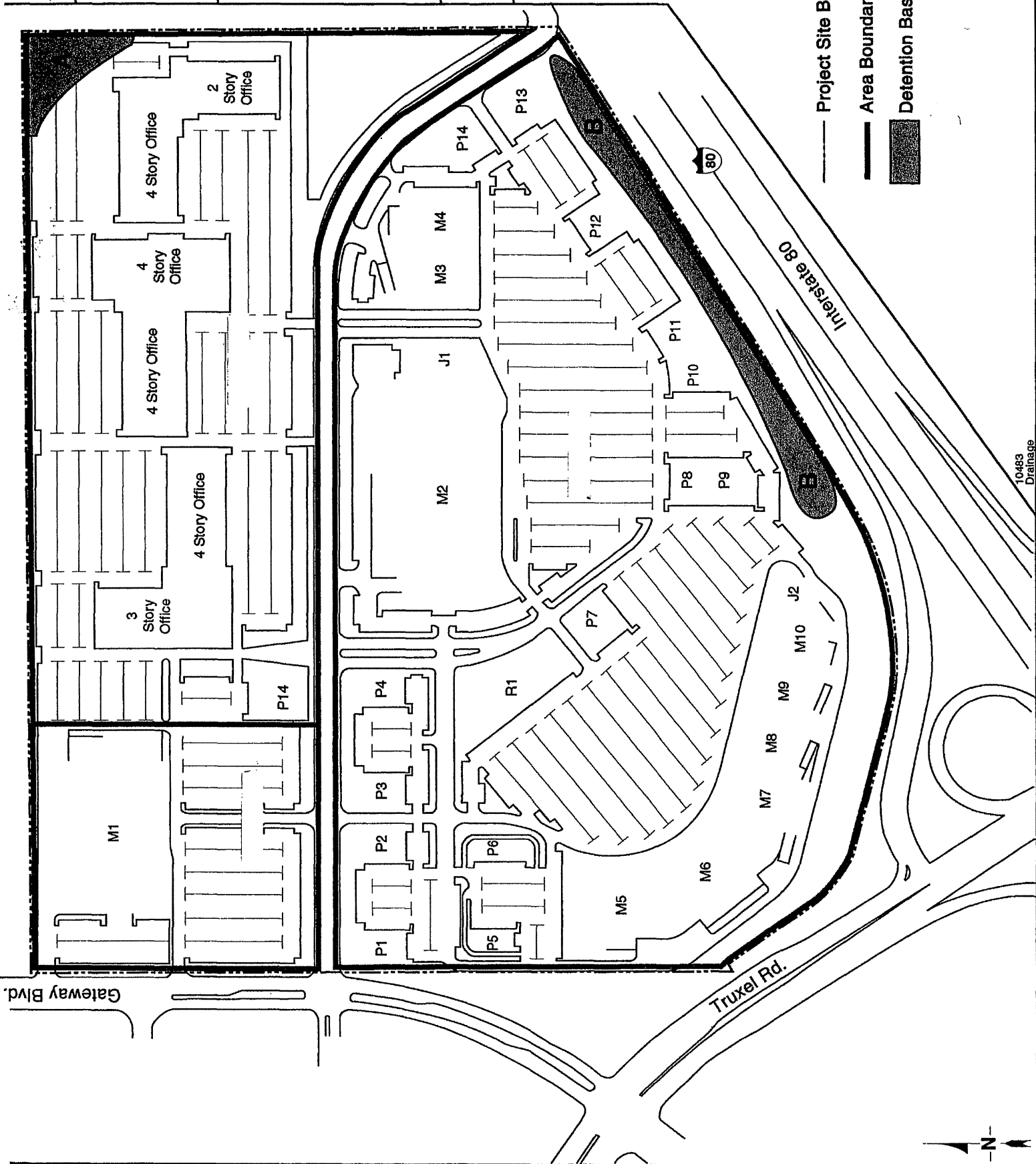
The drainage modeling conducted for the Proposed Project in September 2002 determined that two detention basins would be required to provide storage for surface water runoff at the project site. However, final design may determine that only one basin is required (Basin B). Figure 7.7-1 shows the approximate locations of the proposed detention basins, as well as the proposed configuration of the drainage system. Basin A (identified as DB-A on Figure 7.7-1) would be a dry detention basin located in the northeast portion of the project site, and Basin B (identified as DB-B) would be a linear wet retention/detention basin located along the southern boundary of the project site adjacent to I-80. These basins would drain to RD 1000 facilities. Once in the RD 1000 system, drainage from the project site would ultimately flow to the Sacramento River via the East Drainage Canal and the Natomas Main Drainage Canal.

Basin A (Parcel 33) would be a $2.3 \pm$ acre dry basin located in the northeast corner of the project site. The basin would have grass and would be designed to fill during moderate rainstorms.

Figure 7.7-1

Location of Proposed Detention Basins

No Scale



Basin A would have slopes with a ratio of about 5 to 1 (horizontal to vertical) and would be graded to minimize long-term ponding. Depending on adjacent land use, this basin could have a multi-use purpose as a park or nature area. The bottom elevation of Basin A would be approximately $5\pm$ feet below ground surface (ground surface is at 10 feet msl). Basin B would be linear in shape and is designed to permanently hold stormwater runoff, essentially as an on-site pond. Basin B is designed to have a permanent pool of approximately $6\pm$ acre-feet of water at elevation $4.0\pm$ feet. Basin B is expected to be landscaped with a walking path.¹⁶ Retaining walls up to $3\pm$ feet high would be used to increase storage capacity while maintaining gentle slopes. Table 7.7-1 provides a summary of the two detention basins, showing the land area required to contain a given volume of surface water runoff, and at what approximate depth the water in the basins would be when storing that volume. Table 7.7-2 illustrates the approximate elevation of water in each basin during a storm event. As illustrated by the data in Table 7.7-2, the detention basins are designed to effectively accept flows from the various design storms.

TABLE 7.7-1

**SUMMARY OF DETENTION BASIN
STAGE-STORAGE RELATIONSHIP**

Elevation (feet msl)	Basin A		Basin B		Comments
	Area (acres)	Volume (acre-feet)	Area (acres)	Volume (acre-feet)	
-5.0	-	-	$0.3\pm$	$0.0\pm$	Bottom of permanent pool
0.0	$0.001\pm$	$0.00\pm$	-	-	
4.0	-	-	$1.2\pm$	$6.0\pm$	Top of permanent pool
5.0	$0.010\pm$	$0.02\pm$	$1.7\pm$	$7.6\pm$	Bottom of detention basin
6.0	$0.63\pm$	$0.32\pm$	$2.3\pm$	$9.5\pm$	
7.0	$1.26\pm$	$1.26\pm$	$3.0\pm$	$11.1\pm$	
8.0	$1.63\pm$	$2.7\pm$	$3.6\pm$	$17.7\pm$	
10.0	$2.0\pm$	$5.3\pm$	$4.0\pm$	$21.3\pm$	

Source: Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, Table 1.

TABLE 7.7-2

DETENTION BASIN OPERATIONS DURING STORM EVENTS

Storm Event	Basin A (feet msl)	Basin B (feet msl)
2-year storm	6.2	5.9
10-year storm	7.2	6.8
100-year, 24-hour storm	8.5	7.7
100-year, 10-day storm	8.2	7.5

Source: Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, Table 2.

In addition to the conveyance and storage infrastructure, a pump station would be constructed as part of the Proposed Project. The final configuration would be required to meet the discharge rate specified by RD 1000.

16 Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, p.6.

In summary, the Proposed Project has identified a drainage system to adequately convey and store projected on-site stormwater runoff that would be consistent with discharge criteria established through agreements between RD 1000 and the City of Sacramento.¹⁷ Because the Proposed Project can be accommodated within the existing RD 1000 drainage system and would not increase the potential for on- or off-site flooding over that which currently exists, the impact is considered to be *less than significant*.

Mitigation

7.7-1 Increased stormwater runoff. (Project-specific)

No mitigation would be required for the Proposed Project.

Impact

7.7-2 Urban contaminants in stormwater runoff. (Project-specific)

Construction

Implementation of the Proposed Project would require grading land for roadways, building foundations, parking areas, and landscaping. In addition, construction activities, such as excavation and trenching for utilities, would disturb soil. Construction site runoff, as well as dust generated from other sites, could contain soil and sediment, which could enter receiving waters and degrade water quality. Spills or leaks from heavy equipment and machinery (petroleum products and/or heavy metal), staging areas, or building sites (paints, solvents, and cleaning agents) could also adversely affect receiving water quality by polluting runoff. These potential impacts would generally be short-term and limited to the duration of construction.

Prior to the initiation of site disturbing or construction activities at the project site, the project applicant would be required to obtain a General Construction Activity Stormwater Permit from the CVRWQCB. As indicated in the Regulatory Context, General Permit applicants are required to submit a Notice of Intent (NOI), develop and implement a Stormwater Pollution Prevention Plan (SWPPP), eliminate or reduce non-stormwater discharges, and perform inspections of all BMPs. Examples of typical construction BMPs include, but are not limited to: erosion control BMPs such as mulch, hydroseeding, geotextiles and matts, and soil binders; sediment control BMPs such as silt fences, fiber rolls, gravel bags and storm drain inlet protection; and housekeeping practices such as stabilized construction entrances, vehicle fueling, spill prevention and control, and management of solid waste, concrete, paint, etc.

In addition to the General Construction permit, the project applicant would be required to obtain a grading permit and prepare an erosion and sediment control plan (ESC Plan) in accordance with the Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control. The ESC Plan should include erosion control BMPs, sediment control BMPs and housekeeping practices to be implemented during construction.

¹⁷ Patrick Stiehr, Watermark Engineering, Inc., personal communication, October 16, 2002.

If groundwater were encountered during construction, the project applicant could be required to obtain and comply with the waste discharge requirements of the Central Valley RWQCB's General Order for Dewatering and Other Low-Threat Discharges to Surface Waters. The dewatering permit specifies standards for testing, monitoring, and reporting receiving water limitations and discharge prohibitions.

Operation

Implementation of the Proposed Project would create a substantial amount of impervious surfaces through the construction of building foundations, parking lots, and roadways that would collect urban pollutants. Currently, the project site is undeveloped and surface water runoff is contained on-site by low berms surrounding the project site. Upon development of the site, a drainage system would collect surface water runoff and discharge it into RD 1000's adjacent drainage system. Currently (pre-development), surface water runoff collected at the project site could contain sediment containing nutrients, naturally occurring metals and minerals, and organic matter. Upon development of the project site, activities that could increase the types and quantities of agricultural and non-naturally occurring pollutants in runoff include motor vehicle operations, landscaping maintenance, littering, careless storage and handling of materials, wildlife wastes, and pavement wear. Pollutants typically associated with urban uses, such as those that could be developed as a result of the Proposed Project, could include oil and grease, coliform bacteria, petroleum hydrocarbons (gasoline and diesel fuel), heavy metals such as lead, copper and zinc, suspended solids, and pesticides and herbicides not previously applied at the project site.

In order to control urban pollutants, operation of the Proposed Project would be required to comply with the City of Sacramento's municipal stormwater NPDES permit and Stormwater Ordinance (Chapter 13.16) of the Sacramento City Code. The Stormwater Ordinance would include installation of structural and non-structural BMPs to control urban pollutants. Specific source-control and treatment-control measures would be required in accordance with the City of Sacramento *Guidance Manual for On-Site Stormwater Quality Control Measures and Utilities Procedures Manual*.

Use of water quality BMPs is also required under the agreement established between RD 1000 and the City of Sacramento, and the Proposed Project Preliminary Drainage Master Plan has identified design parameters for the two basins that are intended to reduce pollutants in runoff discharged to the RD 1000 canal. Basin A would function as a dry-extended Sato basin. The bottom of the basin has a gentle slope, and the flow line from the inflow pipe to the outflow would include a meander to lengthen the travel path. Grass on the bottom of the basin would also retard the flow. Such features provide a longer period of time for pollutants to settle out of stormwater before it is released from the basin. Details of final grading, landscape, and vegetation would be provided to the City of Sacramento as site plans are refined. During small storm events, and during dry weather flows, a pipe would connect Basin A to Basin B to allow for stormwater to bypass Basin A and settle in Basin B, allowing Basin A to remain dry during most of the year. Basin B would have a permanent pool of approximately 6 acre-feet at elevation 4.0 feet. The basin would be used as a combination wet pond and dry extended Sato basin. The pumping would be delayed and/or regulated by the low-flow pump to lengthen the residence time of the runoff. The basin would be

emptied over a period of about 48 hours, consistent with adopted drainage criteria for North Natomas.¹⁸

Because stormwater originating from the project site, during construction and operation, would be highly regulated by federal and State permit requirements, as well as the requirements of the Sacramento City Code and agreements established between RD 1000 and the City of Sacramento, this impact, for the Proposed Project, is considered to be *less than significant*.

Mitigation

7.7-2 Urban contaminants in stormwater runoff. (Project-specific)

No mitigation would be required for the Proposed Project.

Impact

7.7-3 Flooding conditions and water quality in the Sacramento River watershed. (Cumulative)

The cumulative context for hydrology and water quality issues is the RD 1000 area tributary to the Sacramento River in the Lower Sacramento watershed.

The Proposed Project has identified a drainage system to adequately convey and store projected on-site stormwater runoff that would be consistent with discharge criteria established through agreements between RD 1000 and the City of Sacramento. As previously noted, the proposed drainage facilities have been configured to allow land use changes without affecting the drainage study.

The Proposed Project's contribution to cumulative drainage and flooding impacts would not be cumulatively considerable. Drainage criteria were developed to ensure sufficient capacity exists in the RD 1000 system to convey flows from the North Natomas area, including the project site, and to minimize the potential for downstream flooding in areas served by RD 1000 and along the Sacramento River.¹⁹ Other future development in the North Natomas Community Plan area that discharge to RD 1000 facilities would be required to develop and implement drainage systems that meet established flow criteria because of agreements established between the City and RD 1000. Therefore, the Proposed Project, in combination with other development in the RD 1000 service area, would not increase the potential for downstream flooding, and the cumulative impact is considered to be *less than significant*.

The Proposed Project's contribution related to discharge of urban pollutants into the Sacramento River watershed would not be cumulatively considerable. Water quality protection measures at the project site would be subject to the requirements of the Basin Plan, and would be enforced through the applicable requirements of the Central Valley RWQCB's NPDES permits, as well as City NPDES municipal stormwater requirements. In addition, development in the City is required to

18 Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, pp.9-10.

19 Patrick Stiehr, Watermark Engineering, Inc., personal communication, October 16, 2002.

include water quality treatment in drainage system design, as described for the Proposed Project. Compliance with these federal and State requirements and City of Sacramento water quality protection standards would help to protect the quality of water in the Lower Sacramento watershed as a result of urban runoff from the North Natomas Community Plan area. Therefore, cumulative impacts would be *less than significant*.

Mitigation

**7.7-3 Flooding conditions and water quality in the Sacramento River watershed.
(Cumulative)**

No mitigation would be required for the Proposed Project.



7.8 Biological Resources



7.8 BIOLOGICAL RESOURCES

INTRODUCTION

This section examines the occurrences of and potential impacts to biological resources that exist within and in the vicinity of the Proposed Project site. The findings presented in this section are based on a reconnaissance-level field survey of the project site and a review of the California Department of Fish and Game (CDFG) Natural Diversity Database (CNDDDB – January 2002). Information from the 1997 Natomas Basin Habitat Conservation Plan (Natomas Basin HCP) and the “Nesting Swainson’s Hawk (*Buteo swainsoni*) in the Natomas Basin Habitat Conservation Plan Area” 2001 and 2002 Annual Survey Results is also incorporated by reference where relevant.

A field survey of the entire project site was conducted on January 3, 2001 to: (1) identify and record wildlife species occurring within the project site; (2) characterize on-site habitats and vegetation; and (3) assess wildlife habitat suitability. Reviews of the CNDDDB were conducted on January 8, 2001 and January 22, 2002 to identify recorded occurrences of special-status species that have been observed or could potentially occur within or in the vicinity of the project site. Four USGS 7.5 minute quadrangle maps were used for the CNDDDB searches: Rio Linda, Taylor Monument, Sacramento East, and Sacramento West. The plants and animals identified by the CNDDDB were reviewed to determine if their requisite habitat parameters were present within or adjacent to the project site. No comments in response to the NOP (July 2000 and September 2002) were received concerning biological resources.

ENVIRONMENTAL SETTING

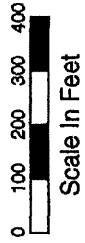
The approximately 126-acre project site is located in the City of Sacramento within the NNCP area (NNCP area). The project site is also located within the southern portion of the Natomas Basin (Basin), approximately three miles north of the confluence of the Sacramento and American Rivers. The Basin is a low-lying area in the Sacramento Valley that historically received drainage waters from the west slope of the Sierra Nevada, producing regular flooding and highly fertile alluvial soils. Today, most of the Basin has been converted to agricultural production and drainage patterns have been altered so that runoff is pumped into the surrounding drainage canals and the Sacramento River. As a result, most natural vegetation communities in the Basin are found primarily along irrigation canals, drainage ditches, and within pasturelands and uncultivated fields, as is demonstrated within the project site.

Project Site Habitats

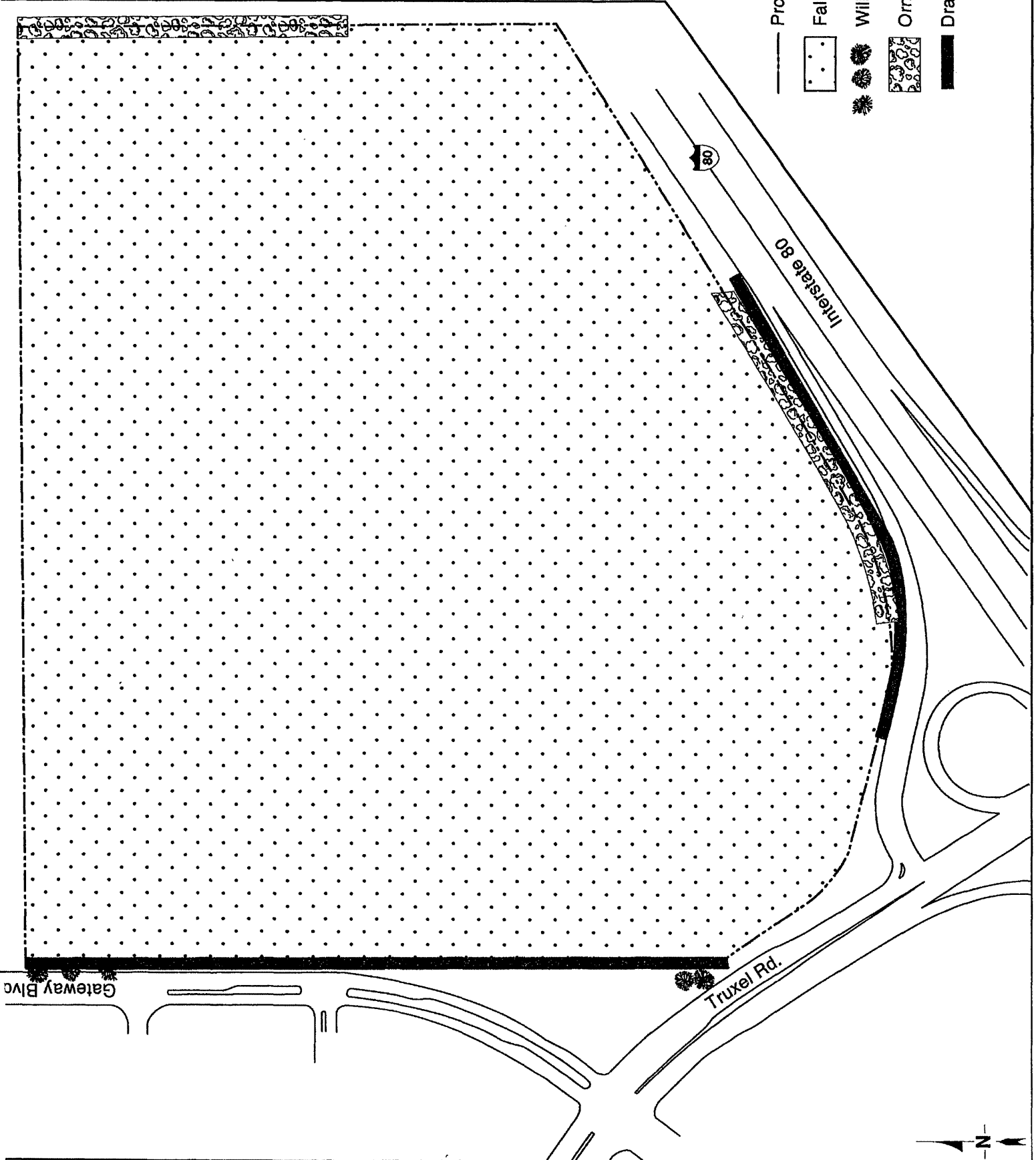
The project site is essentially flat, exhibiting little or no topography. The majority of the project site consists of a fallow agricultural field that is maintained by periodic discing (Figure 7.8-1). Unlined

Figure 7.8-1

Proposed Project Site Habitat Communities



- Project Site Boundary
- Fallow Field
- Willow Trees
- Ornamental Trees
- Drainage Canal





drainage canals that support narrow strips of marsh vegetation (cattails and bulrushes) and Himalayan blackberry (*Rubus discolor*) occur along the western and southern boundaries of the project site. Ruderal (weedy) fields occur adjacent to the project site in various locations and are composed mainly of forbs such as black mustard (*Brassica nigra*), bull thistle (*Cirsium vulgare*), and fennel (*Foeniculum vulgare*) that are growing in remnant mounds of soil left over from construction of nearby commercial buildings. There are no trees within the project site. However, there are several large willow trees that are growing adjacent to the site along the drainage canal on the western boundary of the project site. In addition, there are several ornamental trees growing adjacent to the southern and eastern boundaries of the project site near the southern drainage canal.

Many wildlife species use agricultural fields and ruderal areas for all or part of their life cycle. The juxtaposition of an open field community with adjacent trees, shrubs, and nearby aquatic habitat (i.e., drainage canals, Steelhead Creek, East Drain Canal, Sacramento and American Rivers) provides nesting, feeding, and movement habitat for a variety of wildlife species. Mammal species that are typically found in these habitats include California vole (*Microtus californicus*), black-tailed hare (*Lepus californicus*), and California ground squirrel (*Spermophilus beecheyi*). These rodent populations provide foraging opportunities for mammalian predators, such as coyote (*Canis latrans*), as well as avian predators such as American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), loggerhead shrike (*Lanius ludovicianus*), burrowing owl (*Speotyta albus*) and barn owl (*Tyto alba*).

Wetlands

No wetlands were located within the project site during the January 3, 2001 site visit. However, as described above, drainage canals exist along the western and southern boundaries of the project site (shown on Figure 7.8-2). Drainage canals support various species of wildlife by providing food, water, and cover. Pacific treefrog (*Hyla regilla*), bullfrog (*Rana catesbeiana*), gopher snake (*Pituophis melanoleucus*), common garter snake (*Thamnophis sirtalis*), giant garter snake (*Thamnophis gigas*), deer mouse (*Peromyscus maniculatus*), coyote, red-tailed hawk, red winged blackbird (*Agelaius phoeniceus*), and American kestrel are all species that could be found in or near the drainage canals within the project site.

Special-Status Species

This section examines the potential occurrence of special-status plant and animal species within and in the vicinity of the project site through information collected during a field survey of the project site and a review of the CNDDDB.

For the purposes of this section, special-status species include:

- species that are listed, proposed, or candidate species for listing as Threatened or Endangered by the U.S. Fish and Wildlife Service (USFWS) pursuant to the Federal Endangered Species Act (FESA) of 1969, as amended;
- species designated as Species of Concern by the USFWS;
- species listed as Rare, Threatened, or Endangered by the CDFG pursuant to the California Endangered Species Act (CESA) of 1970, as amended;

- species designated as Fully Protected under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code;
- species designated by the CDFG as California Species of Concern;
- plant species listed as Category 1B and 2 by the California Native Plant Society (CNPS); and
- species that are not currently protected by statute or regulation, but would be considered rare, threatened or endangered under CEQA, or a species considered by the scientific community to be sufficiently rare to qualify for such a listing.

Special-Status Plants

Review of the CNDDDB revealed five special-status plant species that have been observed in the vicinity of the project site: rose mallow (*Hibiscus lasiocarpus*), Sanford's arrowhead (*Sagittaria sanfordii*), dwarf downingia (*Downingia pusilla*), legenere (*Legenere limosa*), and Boggs Lake hedge-hyssop (*Gratiola heterosepala*). However, no suitable habitat is present within or adjacent to the project site for any of these plants, and none of these plants were observed during the January 3, 2001 site visit.

Special-Status Wildlife

Special-status wildlife species that were identified by the CNDDDB as historically occurring in the vicinity of the project site were initially evaluated to determine if the project site is within the animal's known range and distribution, and if suitable habitat exists on-site. Wildlife species whose regional distribution or suitable habitats are not located within or near the project site and who are not expected to be impacted as a result of project implementation were eliminated from further evaluation. For the remaining special-status wildlife species, additional information on range, habitat requirements, and seasonal distribution in Sacramento County was evaluated to determine the likelihood of occurrence of each animal within the project site.

Based on this evaluation and the January 3, 2001 field survey, a total of seven special-status wildlife species were determined to have the potential to exist within or in the vicinity of the project site and could be impacted by the Proposed Project. These include: giant garter snake (*Thamnophis gigas*), Swainson's hawk (*Buteo swainsoni*), loggerhead shrike (*Lanius ludovicianus*), western burrowing owl (*Athene cunicularia hypugea*), tri-colored blackbird (*Agelaius tricolor*), white-tailed kite (*Elanus leucurus*), and northern harrier (*Circus cyaneus*).

Giant Garter Snake

Giant garter snake (*Thamnophis gigas*) (GGS) is listed as a threatened species by the State of California and the USFWS and is protected under the provisions of the California and Federal Endangered Species Acts. GGS are active from the time of their emergence in late March or April to the end of October. Habitat components that are most important to GGS survival are water, emergent aquatic vegetation, steep, vegetated banks for cover, and an abundant food supply. GGS usually occur within a few feet of water and are often found between the water level and the top of adjacent banks. GGS in the Natomas Basin live primarily where rice is grown and the associated ditch/drain components of the water conveyance systems.

Although no GGS were seen during the January 3, 2001 site visit, the drainage canals and adjacent upland vegetation along the western and southern boundaries of the project site provide marginal habitat for this species. The patches of marsh vegetation along the margins of the canals and the surrounding upland habitat provide marginal hibernation habitat, although there are few suitable locations for basking. GGS have been located approximately 300 feet southwest of the project site along the East Drainage Canal.¹

Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is listed as a threatened species by the State of California. Decline of this species has been caused primarily by the loss of nesting habitat and associated foraging habitat. A medium-size migratory bird, this hawk formerly had a wide breeding range in California that included the northeastern portion of the state (e.g., Modoc and Lassen counties), the Sacramento and San Joaquin valleys, and the coast range from Monterey County south through San Diego County. The Swainson's hawk nests primarily within riparian corridors in the San Joaquin Valley. However, the Swainson's hawk will also nest in isolated trees, trees along field borders or roads, small groves, or on the edges of remnant oak woodlands if they are located within flying distance (about 5 miles) of suitable foraging habitat. Swainson's hawks forage in grasslands, fallow fields, livestock pastures, and low-growing cropland for insects and small rodents.

There is a moderate potential for this species to forage within the project site since the habitats that are on and adjacent to the project site provide suitable foraging habitat. Swainson's hawk nest sites are considered active if they have been used one or more times within the last five years.² According to the Nesting Swainson's Hawks (*Buteo swainsoni*) in the Natomas Basin Habitat Conservation Plan Area 2001 and 2002 Annual Survey Results there are 25 active nest sites within 5 miles of the project site. Of these 25 nest sites, two are located within one mile of the site, two are located between one and two miles from the site, eight are located between two and three miles, eight are located between three and four miles from the site, and five are located between four and five miles from the site. There is also a moderate potential for this species to nest within the trees that are immediately adjacent to the western boundary of the project site.

Loggerhead Shrike

Loggerhead Shrike (*Lanius ludovicianus*) is classified as both a federal and California species of special concern. This bird is a resident in the lowlands and foothills throughout California. It prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Loggerhead shrikes occur rarely in heavily urbanized areas, but are often found in open cropland. There are no records of this species documented in the CNDDDB within the region.³ However, suitable nesting habitat exists within the mature willow trees that are growing adjacent to the drainage canals at the southern and northwestern boundaries of the project site. Suitable foraging habitat for this species exists within the project site. An individual Loggerhead shrike was the only special-status wildlife species observed on-site during the January 3, 2001 site visit. An individual was observed perching in a large willow tree that is growing adjacent to the southwestern boundary of the project site.

1 Search of California Natural Diversity Database (CNDDDB), January 2002.

2 California Department of Fish and Game, Staff Report regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California, 1994.

3 CNDDDB, January 2002.

Western Burrowing Owl

The western burrowing owl (*Athene cunicularia hypugea*) is classified as both a federal and California species of special concern. Its habitat consists of open, dry grassland, desert habitats, and open shrub stages of pinyon juniper and ponderosa pine habitats. The western burrowing owl uses rodent or other mammal burrows for roosting and nesting. Breeding occurs during March through August with the peak in April and May. The western burrowing owl feeds mostly on insects, small mammals, reptiles, birds, and carrion. Conversion of grassland to agriculture, development, and poisoning of ground squirrels have contributed to its reduction in numbers. Predators include prairie falcons, red-tailed hawks, northern harriers, golden eagles, foxes, coyotes, and domestic dogs and cats. Western burrowing owls forage in grasslands, livestock pastures, and low-growing croplands.

There is a moderate potential for this species to nest within the project site and within the ruderal fields that are adjacent to the project site. In addition, the project site provides suitable foraging habitat for this species, and it has been documented as nesting within the banks of the East Drain Canal, approximately 0.25 miles west of the project site.⁴

Tricolored Blackbird

The tricolored blackbird (*Agelaius tricolor*) (TCBB) is classified as both a federal and California species of special concern. This species is a colonial nester. Nesting sites are usually adjacent to open water habitats within protected substrates such as cattails and blackberry thickets. Foraging areas with insect prey are generally within two miles of the colony and consist of grasslands, wetlands, and rice fields.

Although TCBB were not observed within the project site during the January 3, 2001 site visit, the blackberry thickets that are adjacent to the western boundary of the project site do provide marginal nesting habitat and the species has been documented as nesting within approximately 3 miles of the project site.⁵

White-tailed Kite

White-tailed kite (*Elanus leucurus*) is classified as a California Department of Fish and Game fully protected species, and is protected under the provisions of the California Fish and Game Code and Migratory Bird Treaty Act. This species prefers open grasslands close to isolated, dense-topped trees for nesting and perching.

The project site provides foraging habitat for this species while the trees adjacent to the project site provide marginal nesting habitat. This species was not observed within the project site.

4 EIP Associates, unpublished data, January 2000.

5 CNDDDB, January 2002.

Northern Harrier

Northern harrier (*Circus cyaneus*) is classified as a California species of special concern and is protected under the provisions of the California Fish and Game Code and Migratory Bird Treaty Act. This species prefers to nest and forage on the ground in open grasslands.

The project site provides suitable foraging habitat for this species. This species was not observed within the project site during the January 3, 2001 site visit.

REGULATORY SETTING

Federal

Endangered Species Act

Projects that would result in adverse effects on federally listed threatened or endangered species are required to consult with and mitigate through consultation with the USFWS. The objective of consultation is to determine whether the project would impact a protected species or designated critical habitat, and to identify mitigation measures that would be required to avoid or reduce impacts to the species. This consultation can be pursuant to either Sections 7 or 10 of the Endangered Species Act (ESA). Section 7 consultation is required when a federal agency is involved in project approval, funding, or permitting. Section 10 consultation is required when no federal agencies are involved with the project.

The federal ESA of 1973 provides legal protection and requires definition of critical habitat and development of recovery plans for plant and animal species in danger of extinction. Section 7 of the ESA requires federal agencies to make a finding on all federal actions, including the approval by an agency of a public or private action, such as the issuance of a permit pursuant to Sections 10 and 404 of the Clean Water Act, on the potential to jeopardize the continued existence of any listed species potentially impacted by the action. Section 9 of the ESA prohibits the take of any member of an endangered species. Take is defined by the ESA as "...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS has further defined the terms harass and harm. Harass is defined as follows:

"...an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering."

Harm is defined to include the following:

"...significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering."

Section 10(a) of the ESA permits the incidental take of listed species if the take is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."

6 The Federal Endangered Species Act of 1973, as amended (16 USC 1531 *et seq.*). Sections 7, 9, and 10.

Section 3 of the ESA defines an endangered species as any species, including subspecies, in danger of extinction throughout all or a significant portion of its range.” This section defines threatened species as any species “likely to become endangered within the foreseeable future throughout all or a significant portion of its range.” Federally listed or “listed” indicates that a species has been designated as endangered or threatened through publication of a final rule in the *Federal Register*. Designated endangered and threatened species, listed under Section 4 of the ESA, receive the full protection of the ESA. Proposed endangered and threatened species are those for which a proposed regulation, but not a final rule, has been published in the *Federal Register*. Proposed species are granted limited protection, while candidate species and species of special concern are afforded no protection under the ESA.

Migratory Bird Treaty Act – 1936

The Migratory Bird Treaty Act (MBTA) regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 Code of Federal Regulations (CFR) Section 10.13. The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country, and is enforced in the United States by the USFWS. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50 CFR 20. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors). Six families of raptors occurring in North America were included in the amendment:

- Accipitridae (kites, hawks, and eagles);
- Cathartidae (New World vultures);
- Falconidae (falcons and caracaras);
- Pandionidae (ospreys);
- Strigidae (typical owls); and
- Tytonidae (barn owls).

All species and subspecies of the families listed above are protected under the amendment.

Federal Clean Water Act

Section 404

The objective of the Clean Water Act (CWA, 1977, as amended) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Section 301 prohibits the discharge of any pollutant into the Nation's waters without a permit, and Section 402 sets up the permit program. Section 404 of the CWA regulates activities that result in discharge of dredged or fill material into waters of the United States. The United States Army Corps of Engineers (Corps) is responsible for permitting certain types of activities affecting wetlands and “other waters of the United States.” Under Section 404 of the Clean Water Act (CWA, 1972), the Corps has the authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the U.S. The Corps implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or acres.

Section 401

The State Water Resources Control Board (SWRCB) has authority over wetlands through Section 401 of the CWA, as well as the Porter-Cologne Act, California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy.

The CWA requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) first obtain a certificate from the appropriate state agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the SWRCB to the nine regional boards. The Central Valley Regional Water Quality Control Board is the appointed authority for Section 401 compliance in the project area. A request for certification or waiver is submitted to the regional board at the same time that an application is filed with the Corps. The regional board has 60 days to review the application and act on it. Because no Corps permit is valid under the CWA unless "certified" by the state, these boards may effectively veto or add conditions to any Corps permit.

State

California Environmental Quality Act (CEQA)

Although threatened and endangered species are protected by specific federal and State statutes, CEQA Guidelines section 15380(b) provides that a species not listed on the federal or State list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after definitions in the FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380(b) requires public agencies to undertake reviews to determine if projects would result in significant effects on species that are not listed by either the USFWS or CDFG (i.e., candidate species). Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

California Endangered Species Act (CESA)

The CDFG administers a number of laws and programs designed to protect fish and wildlife resources. Principal of these is the California Endangered Species Act of 1984 (CESA - Fish and Game Code section 2050), which regulates the listing and take of state-endangered and state-threatened species. CESA declares that deserving species will be given protection by the state because they are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the state. CESA established that it is state policy to conserve, protect, restore, and enhance endangered species and their habitats.

Species listed under CESA cannot be taken without adequate mitigation and compensation. The definition of take under CESA is the same as described above for the federal ESA. However, based on findings of the California Attorney General's Office, take under CESA does not prohibit indirect harm by way of habitat modification. Typically, the CDFG implements endangered species protection and take determinations by entering into management agreements (section 2081 Management Agreements) with project applicants.

CDFG maintains lists for Candidate-Endangered Species and Candidate-Threatened Species. California candidate species are given equal protection of the law as listed species have. CDFG also lists Species of Special Concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Species of special concern do not receive protection under the CESA or any section of the California Fish and Game Code, and do not necessarily meet CEQA Guidelines section 15380 criteria as rare, threatened, endangered, or of other public concern. Like federal species of concern, the determination of significance for California species of special concern must be made on a case-by-case basis. Designation of Species of Special Concern is intended by CDFG as a management tool for consideration in future land use decisions.

Fish and Game Code - Sections 3503, 3503.5, 3513

Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects all birds-of-prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act. These regulations could require that elements of the Proposed Project (particularly vegetation removal or construction near nest trees) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFG and/or USFWS.

Fish and Game Code – Sections 3511, 4700, 5050, and 5515

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code designate certain species as "fully protected." Fully protected species, or parts thereof, may not be taken or possessed at any time, and no provision of the California Fish and Game Code or any other law may be construed to authorize the issuance of permits or licenses to take any fully protected species. No such permits or licenses heretofore issued may have any force or effect for any such purpose, except that the California Fish and Game Commission may authorize the collecting of such species for necessary scientific research. Section 3511 of the California Fish and Game Code may authorize the live capture and relocation of fully protected birds pursuant to a permit for the protection of livestock. Legally imported and fully protected species or parts thereof may be possessed under a permit issued by CDFG.

CDFG Wetlands Protection Regulations

The CDFG derives its authority to oversee activities that affect wetlands from a number of pieces of legislation. This authority includes sections 1600-1607 of the Fish and Game Code (stream and lakebed alteration agreements), section 30411 of the California Coastal Act (CDFG becomes the lead agency for the study and identification of degraded wetlands within the Coastal Zone), CESA (protection of state listed species and their habitats - which may include wetlands), and the Keene-Nejedly California Wetlands Preservation Act of 1976 (states a need for an affirmative and sustained public policy program directed at wetlands preservation, restoration, and enhancement).

In general, the CDFG asserts authority over wetlands within the state either through review and comment on Corps Section 404 permits, review and comment on CEQA documents, preservation of state listed species, or through stream and lakebed alteration agreements.

CDFG Streambed Alteration Agreements

Under sections 1600-1607 of the California Fish and Game Code, the CDFG regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFG's jurisdiction are defined in the code as the . . . "bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit..." (Section 1601).

This broad definition gives the CDFG great flexibility in deciding what constitutes a river, stream, or lake. The CDFG defines streams under the jurisdictions of sections 1600-1607 as follows:

1. The term "stream" can include intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams (United States Geological Survey [USGS] maps), and watercourses with subsurface flows. Canals, aqueducts, irrigation ditches, and other means of water conveyance can also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.
2. Biological components of any stream may include aquatic and riparian vegetation, all aquatic animals including fish, amphibians, reptiles, invertebrates, and terrestrial species that derive benefits from the stream system.
3. As a physical system, a stream not only includes water (at least on an intermittent or ephemeral basis), but also a bed or channel, a bank and/or levee, instream features such as logs or snags, and various floodplains depending on the return frequency of the flood event being considered.
4. The lateral extent of a stream can be measured in several ways depending on a particular situation and the type of fish or wildlife resource at risk. The following criteria are present in order from the most inclusive to the least inclusive:
 - a. The floodplain of a stream can be the broadcast measurement of a stream's lateral extent depending on the return frequency of the flood event used. For most flood control purposes, the 100-year flood event is the standard measurement. However, because it may include significant amounts of upland or urban habitat, in many cases the 100-year floodplain may not be appropriate.
 - b. The outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats and is therefore a reasonable and identifiable boundary for the lateral extent of a stream. In most cases, the use of this criterion should result in protecting the fish and wildlife resources at risk.
 - c. Most streams have a natural bank which confines flows to the bed or channel except during flooding. In some instances, particularly on smaller streams or dry washes with little or no riparian habitat, the bank should be used to mark the lateral extent of a stream.
 - d. A levee or other artificial stream bank could also be used to mark the lateral extent of a stream. However, in many instances, there can be extensive areas of valuable riparian habitat located behind a levee.

In practice, the CDFG usually marks its jurisdictional limit at the top of the stream or bank, or at the outer edge of the riparian vegetation, whichever is wider.

California Wetlands Conservation Policy

The California Wetlands Conservation Policy (1993 - Senate Concurrent Resolution No. 28) created an interagency task force headed by the State Resources Agency and California EPA to: (1) ensure no overall net loss, and a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values; (2) reduce procedural complexity in the administration of state and federal wetlands conservation programs; and (3) encourage partnerships that make restoration, landowner incentives, and cooperative planning the primary focus of wetlands conservation.

This resolution directed the CDFG to prepare and submit to the legislature a plan identifying means to protect existing wetlands and restore former wetlands. This includes identification of sufficient potential wetlands sites to increase the amount of wetlands in California by 50 percent by the year 2000, and a program for the public and private acquisition of such lands. While the resolution does not have the force and effect of law, CDFG and other California state agencies frequently point to it as an expression of state policy.

Porter-Cologne Act

Pursuant to the Porter-Cologne Act, each of California's nine regional boards must prepare and periodically update basin plans that set forth water quality standards for surface and groundwater, as well as actions to control point and non-point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to achieve wetlands protection through enforcement of water quality standards.

Local

City of Sacramento General Plan

The City of Sacramento General Plan's conservation strategy focuses on habitat conservation, minimization of impacts on sensitive biological resources, and the preservation of plant and animal diversity as the most effective way to protect individual special status species.

The following City of Sacramento General Plan⁷ policies will guide the conservation and protection of biological resources in regards to the Proposed Project:

Preservation of Natural Resources

- Goal A/Policy 2 Continue to implement the Heritage Tree Program.
- Goal B/Policy 1 Protect the wooded areas along the waterways and drainage canals insofar as possible.
- Goal C/Policy 1 Retain the habitat areas where known endangered wildlife exists to the extent feasible.
- Goal E/Policy 1 Explore ways to reverse degradation and pollution and enhance the natural beauty and wildlife habitats of creeks and drainage canals.

⁷ City of Sacramento General Plan, January 1988. Sections 6-12 through 6-16.

Conservation of, and Open Space Used For, the Managed Production of Resources

Goal A/Policy 1 Phase the conversion of agricultural lands to urban uses while implementing the policies of the North Natomas Community Plan.

Goal A/Policy 2 Work with Sacramento County to explore the feasibility of an agricultural preservation plan.

City of Sacramento Tree Ordinance

The City of Sacramento has adopted an ordinance to protect trees⁸ as a significant resource to the community. It is the City's policy to retain trees when possible regardless of their size, and when circumstances will not allow for retention, permits may be issued to remove trees that are within City jurisdiction. Removal of or construction around trees that occur in the median between the curb and sidewalk are subject to permission and inspection by City arborists. The City of Sacramento Tree Service Division reviews project plans and works with developers during the construction process to minimize impacts to street trees in the city.

The City of Sacramento ordinance to protect heritage trees includes the following policies (Title 12 of the Sacramento City Code):

Chapter 12.56 – Trees Generally

Policies 12.56.010 – 12.56.170

Chapter 12.64 – Heritage Trees

Policies 12.64.010 – 12.64.070

North Natomas Community Plan

The NNCP is a basic study for the physical development of the North Natomas area of the City of Sacramento.⁹ The text outlines the policies used to guide actions in the development of the community.

The following NNCP guiding and implementing policies will guide the conservation and protection of biological resources in regards to the Proposed Project:

Guiding Policies

- A. Promote the stewardship of the Community's natural resources.
- C. Enhance the visual entrance to the community along the freeways by creating landscaped freeway corridors.
- E. Promote healthy urban landscapes to enhance the quality of life in the community for the long term by conserving natural resources, improving air quality, providing biodiversity, and strengthening a sense of place.

8. Sacramento City Code, Title 12, November 2001.

9. City of Sacramento Department of Planning and Development. *North Natomas Community Plan*, May 3, 1994. Pages 58-60.

- F. A Habitat Conservation Plan (HCP) shall be developed in coordination with SAFCA, State Fish and Game and US Fish and Wildlife to protect vegetation and wildlife from the impacts of urbanization.

Implementing Policies

- Landscaped Freeway Buffers
- Urban Forest
- Develop a Habitat Conservation Plan/Habitat Mitigation Plan

Natomas Basin Habitat Conservation Plan Status (NBHCP)

The 1994 North Natomas Community Plan required the development and implementation of a Habitat Conservation Plan as mitigation for development in North Natomas. The NBHCP is a conservation plan supporting application for incidental take permits (ITPs) under Section 10(a)(1)(B) of the Endangered Species Act and under Section 2081 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 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 mitigation requirements include:

- Payment of HCP fees at a ratio of .5 to 1 or, if approved by The Natomas Basin Conservancy (TNBC), dedication of land at a ratio of .5 to 1 (please see page VI-2, Section B, 1 of the Final NBHCP).
- Reconnaissance-level surveys to determine what habitats are present on a proposed development site. (Reconnaissance surveys are submitted with the developer's application).
- Pre-construction surveys for potential special status species not less than 30 days or more than 6 months prior to construction activities.
- Species-specific mitigation, as required, per USFWS and CDFG protocol.
- Grading permit issued and habitat removed.

City of West Sacramento Tree Ordinance

The City of West Sacramento has adopted a tree preservation ordinance to preserve and protect trees.¹⁰ The City requires that a permit be obtained prior to trimming or pruning any street, landmark, significant or heritage trees five inches in diameter or greater or removal of any street, landmark, significant or heritage trees. In addition, during project construction the city requires a tree permit be obtained in any activities could harm any landmark, significant or heritage trees present on the site.

IMPACTS AND MITIGATION MEASURES

Method of Analysis

The analysis of impacts on plant and animal resources was based on a review of available literature and data collected during the January 3, 2001 survey of the project site regarding the life history, status, and distribution of habitats and species. The CNDDDB was reviewed for known sensitive species occurrences in the Rio Linda, Taylor Monument, Sacramento East, and Sacramento West USGS 7.5 minute quadrangles. Plants and animals identified by the CNDDDB were reviewed to determine if their requisite habitat parameters were present within or in the vicinity of the project site.

For this analysis of impacts on biological resources, the conservative assumption is made that all habitats would be lost within the project site. Resources that could be affected by the Proposed Project have been identified, and necessary recommendations for mitigation to preserve those resources are provided.

Adverse impacts on plant and animal resources were evaluated when habitat for special-status species occurred onsite or a special-status species was known to use the site for part or all of its lifecycle. Impacts were determined based on the development of the project site and the effect this would have on special-status species or their habitats as described below in the Standards of Significance.

Standards of Significance

For the purposes of this EIR, an impact is considered significant if the Proposed Project or Alternatives would:

- Create a potential health hazard, or use, produce or dispose of materials that would pose a hazard to a plant or animal population in the project area;
- Result in a substantial degradation of the quality of the environment, destruction of the habitat, or reduction of the population of a threatened or endangered plant or animal species below self-sustaining levels;

10 City of West Sacramento Municipal Code Chapter 8.24 Tree Preservation.

*Impact***7.8-3 Loss of Swainson's Hawk habitat (nesting and foraging). (Project-specific)**

The Swainson's hawk nests primarily within riparian corridors in the Central Valley. However, the Swainson's hawk will also nest in isolated trees, trees along field borders or roads, small groves, or on the edges of remnant oak woodlands if they are located within flying distance (about 5 miles) of suitable foraging habitat. The trees that are located immediately adjacent to the western boundary of the project site provide suitable nesting habitat for the Swainson's hawk. The project site mainly consists of a fallow field, and as such provides suitable foraging habitat for the Swainson's hawk, because this species typically forages for insects and small rodents in grasslands, fallow fields, livestock pastures, and low-growing croplands. There are approximately 25 Swainson's hawk nest sites within five miles of the project site.

Swainson's hawk is listed as a threatened species by the CDFG, and is protected under the provisions of the California Endangered Species Act (CESA) and the California Fish and Game Code (sections 3503 and 3511). Should the Proposed Project impact this species, the project applicant would have to demonstrate compliance with CESA. However, CESA only regulates "take" of individuals and does not address habitat loss that is not directly linked to the loss of individuals of State-listed species. Therefore, the loss of potential Swainson's hawk foraging habitat is addressed only as a CEQA issue, while the potential loss or disturbance of Swainson's hawk nest sites is a CEQA and CESA issue.

The Proposed Project would convert land that supports suitable foraging and nesting habitat for Swainson's hawk into urban uses through rough and finished grading; construction of buildings, roads, and placement of related infrastructure. Implementation of the Proposed Project would remove approximately 120 acres of suitable Swainson's hawk foraging habitat, and could remove suitable nesting trees that are immediately adjacent to the western boundary of the project site. Loss of foraging habitat for this species could result in indirect mortality of adults and juveniles due to increased foraging competition, and increased foraging costs. Implementation of the Proposed Project could also result in the disruption of nesting Swainson's hawks, if they are found to be nesting within trees that are along the western boundary of the project site.

Removal of Swainson's hawk foraging habitat and potential disturbance of Swainson's hawk nest sites are considered *significant impacts*.

*Mitigation***7.8-3 Loss of Swainson's Hawk habitat (nesting and foraging). (Project-specific)**

Implementation of the following mitigation measures would reduce the impact from the Proposed Project to a less-than-significant level because development cannot occur until these mitigation measures are fully implemented.

- (a) *The project applicant/developer shall comply with all requirements of the adopted Natomas Basin HCP and any additional mitigation measures identified in the Natomas Basin HCP EIR/EIS and conditions in the ITPs issued by USFWS and CDFG.*

Species-specific mitigation measures from the Final Natomas Basin HCP include:

- (b) *Pre-construction surveys to determine whether any Swainson's Hawk nest sites occur on or within 1/2 mile of the lands designated for development.*
- (c) *Timing restrictions for construction activity if an occupied Swainson's hawk nest is identified (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.*
- (d) *An on-site biological monitor (CDFG-approved raptor biologist funded by the developer) would be assigned to the project if construction or other project-related activities that could cause nest abandonment or forced fledging are proposed within the 1/4 mile buffer zone.*
- (e) *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.*
- (f) *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.*
- (g) *Annually, prior to the Swainson's hawk nesting season (March 15 to September 15) and until build out of their Authorized Development has occurred, the City of Sacramento and Sutter County will notify each landowner of any property within the permit area(s) on which a Swainson's hawk nest tree is present, and will identify the nest tree, and alert the owner to the specific mitigation measures prohibiting the owner from removing the nest tree.*

Compliance with Mitigation Measures 7.8-3 (a) through (g) will reduce project impacts to Swainson's hawk to a less-than-significant level by ensuring the implementation of conservation strategies outlined for Swainson's hawk (a covered species) in the Natomas Basin HCP, as well as additional mitigation measures identified in the Natomas Basin HCP EIR/EIS and conditions in the ITPs. These conservation strategies, mitigation measures, and conditions will ensure that project impacts to Swainson's hawks or their habitat will be fully offset by replacing the amount (through applicable mitigation ratios), type, and value of Swainson's hawk habitat lost to project construction, as well as reducing potential impacts to active Swainson's hawk nests that may be within or adjacent to the project site.

Impact

7.8-4 Loss of foraging and nesting habitat for non-listed special-status avian species. (Project-specific)

The project site associated with implementation of the Proposed Project consists of open fallow and ruderal fields, and as such provide suitable foraging and nesting habitat for several non-listed, special-status avian species, including northern harrier, western burrowing owl, loggerhead shrike, tri-colored blackbird, and white-tailed kite. At least one of these species, the western burrowing owl, has been documented as nesting within the banks of the east Drain Canal, approximately 0.25 miles

burrowing owl nests and unfledged young and/or replacing the amount (per applicable mitigation ratios) and value of nesting habitat lost to project construction.

Impact

7.8-5 Loss of suitable habitat for giant garter snake. (Project-specific)

The giant garter (GGS) snake is listed as a threatened species by CDFG and the USFWS and is protected under the provisions of the California and Federal Endangered Species Acts. This species is a highly aquatic snake, relying upon aquatic environments both for food and for shelter and escape from predators. Although no GGS were seen during the January 3, 2001 site visit of the Proposed Project site, the drainage canals and adjacent upland vegetation along the western and southern boundaries of the project site provide marginally suitable habitat for GGS. The patches of vegetation along the margins of the canals provide adequate hibernation habitat and the banks of the canals provide suitable locations for basking. The USFWS typically considers all upland areas within 200 feet of aquatic giant garter snake habitat to be upland habitat for GGS. Implementation of the Proposed Project could result in the removal of suitable GGS aestivation habitat, which, in turn, could result in the incidental direct take of GGS (mechanical injury) and indirect take through habitat loss. Danger posed by construction activities is greatest during the winter dormant period (November through March) when these snakes are inactive below the ground and are unable to flee machinery. Loss of suitable habitat for the GGS and potential take of this species is considered to be a *significant impact*.

Mitigation

7.8-5 Loss of suitable habitat for giant garter snake. (Project-specific)

Implementation of the following mitigation measure would reduce the magnitude of this impact for the Proposed Project to a *less-than-significant level*.

(a) *Implement Mitigation Measure 7.8-3 (a).*

Compliance with Mitigation Measure 7.8-3 (a) would reduce project impacts to GGS to a less-than-significant level by ensuring the implementation of conservation strategies outlined for GGS (a covered species) in the Natomas Basin HCP, as well as additional mitigation measures identified in the Natomas Basin HCP EIR/EIS and conditions in the ITPs. These conservation strategies, mitigation measures, and conditions will ensure that project impacts to GGS or their habitat will be fully offset by replacing the amount (through applicable mitigation ratios), type, and value of GGS habitat lost to project construction, as well as avoiding impacts to individual GGS, aestivation sites, or basking habitat that may be within or adjacent to the project site.

(b) *Timing restrictions: No grading, excavating or filling activities will take place within 30 feet of existing giant garter snake habitat between October 1 and May 1, unless approved by CDFG. By conducting earth-moving activities during the summer months when snakes are active, it is expected that snakes in the construction area will be able to avoid construction equipment such that direct injury or mortality would be avoided. Further, snakes will not be in their winter retreats where they are vulnerable to injury during earth-moving activities.*

- (c) *Dewatering requirements: Dewatering of existing habitat will begin after November 1, but no later than April 1 of the following year. All water must be removed from existing habitat by April 15, or as soon thereafter as weather permits, and the habitat will be kept dry without any standing water for 15 consecutive days after April 15 and prior to excavating or filling the dewatered habitat. By dewatering habitat between November 1 and April 1, snakes would not be attracted to construction zones when they emerge from their winter retreats. If habitat must be dewatered after April 15, it must remain dry for 15 consecutive days prior to excavating or filling the habitat. Snakes have been found to leave habitat within a few days of dewatering (USFWS, 1999b). By waiting 15 days after dewatering, it is reasonable to expect that any snakes would have left the construction zone prior to start of construction activities and injury to snakes would be avoided.*

Compliance with Mitigation Measures 7.8-5 (b) and (c) would reduce project impacts to GGS to a *less-than-significant* level by replacing the amount (through applicable mitigation ratios), type, and value of GGS habitat lost to project construction, as well as avoiding impacts to individual GGS, aestivation sites, or basking habitat that may be within or adjacent to the project site.

Impact

7.8-6 Loss of biological resources. (Cumulative)

Over the past 150 years, urban development has encroached upon and removed biological resources throughout the Central Valley, including wetlands, riparian vegetation, annual grasslands, and other habitats that support special-status species. The project site supports small pockets of habitat, including suitable habitat for GGS, Swainson's hawk, and non-listed special status avian species. The project site also supports potential jurisdictional waters of the United States and is adjacent to potential City of Sacramento heritage trees. Habitat values associated with the majority of habitats affected by this project are relatively low due to the proximity of urban uses, isolation and fragmentation, urban runoff, and invasion of non-native species. However, despite the relatively low values, many of these habitats are still used by special status species, and project impacts to these habitats and the species they support can be significant. As discussed in project impacts 7.8-1 through 7.8-5, construction of the Proposed Project would result in the loss and/or degradation of up to 126-acres of suitable foraging habitat for Swainson's hawk and non-listed special status avian species, suitable habitat for GGS, potential City of Sacramento heritage trees, and potential waters of the U.S. Impacts to these species and habitats can be fully mitigated at the project specific level to a level of less-than-significant. However, the Proposed Project's incremental contribution to cumulative impacts to these habitats and the species they support in the Sacramento region and throughout the Central Valley is considered a *significant cumulative impact*.

Mitigation

7.8-6 Loss of biological resources. (Cumulative)

Based on implementation of Mitigation Measures 7.8-1 through 7.8-5 that ensure compliance with the adopted Natomas Basin HCP and are consistent with the Natomas Basin HCP EIR/EIS Findings and Statement of Overriding Considerations, the project's incremental contribution to cumulative impacts to habitats and special-status species would be less than significant. The proposed project's contribution to significant ongoing regional and statewide habitat losses is considered less than significant.

- a) *Implement Mitigation Measures 7.8-1(a) through (c); 7.8-2; 7.8-3 (a) through (g); 7.8-4 (a) through (c); and 7.8-5(a) through (c).*

7.9 Cultural Resources

two temporally distinct cultural traditions. Later work at other mounds by Sacramento Junior College and the University of California, Berkeley, enabled the investigators to identify a third cultural tradition, intermediate between the previously postulated Early and Late Horizons. The three-horizon sequence, based on discrete changes in ornamental artifacts and mortuary practices, as well as on observed differences in soils within sites³ was later refined by Beardsley.⁴ An expanded definition of artifacts diagnostic of each time period was developed, and its application extended to parts of the central California coast. Traits held in common allow the application of this system within certain limits of time and space to other areas of prehistoric central California.

The Windmill Culture (Early Horizon) is characterized by ventrally-extended burials (some dorsal extensions are known), with westerly orientation of heads; a high percentage of burials with grave goods; frequent presence of red ocher in graves; large projectile points, of which 60 percent are of materials other than obsidian; rectangular *Haliotis* beads; *Olivella* shell beads (types A1a and L); rare use of bone; some use of baked clay objects; and well-fashioned charmstones, usually perforated.

The Cosumnes Culture (Middle Horizon) displays considerable changes from the preceding cultural expression. The burial mode is predominately flexed, with variable cardinal orientation and some cremations present. There is a lower percentage of burials with grave goods, and ocher staining is common in graves. *Olivella* beads of types C1, F and G predominate, and there is abundant use of green *Haliotis* sp. rather than red *Haliotis* sp. Other characteristic artifacts include perforated and canid teeth; asymmetrical and "fishtail" charmstones, usually not perforated; cobble mortars and evidence of wooden mortars; extensive use of bone for tools and ornaments; large projectile points, with considerable use of rock other than obsidian; and use of baked clay.

Hotchkiss Culture (Late Horizon) -- The burial pattern retains the use of the flexed mode, and there is wide spread evidence of cremation, lesser use of red ocher, heavy use of baked clay, *Olivella* beads of Types E and M, extensive use of *Haliotis* ornaments of many elaborate shapes and forms, shaped mortars and cylindrical pestles, bird-bone tubes with elaborate geometric designs, clam shell disc beads, small projectile points indicative of the introduction of the bow and arrow, flanged tubular pipes of steatite and schist, and use of magnesite.

The above chronology is adapted from Michael J. Moratto's *California Archaeology*, 1984, (Academic Press, New York: 181-183). The characteristics noted are not all-inclusive, but cover the more important traits.

Ethnographic Background

The Nisenan, or Southern Maidu, occupied the upper drainages and the adjacent ridges of the Yuba, the north, middle, and south forks of the American, and at least the upper north side of the Cosumnes River. The eastern limit of their territory is conventionally believed to extend to the crest of the Sierra. The Nisenan in the valley proper also occupied some area west of the lower reaches of the Feather River.⁵ This territory included all of the project area.

-
- 3 *California* 1936, Sacramento, Sacramento Junior College, Department of Anthropology Bulletin 1.
 - 4 Jeremiah B. Lillard, Robert F. Heizer and Franklin Fenenga, An Introduction to the Archaeology of Central California, 1939, Sacramento, Sacramento Junior College, Department of Anthropology Bulletin 2.
 - 5 Richard K. Beardsley, *Temporal and Areal Relationships in Central California Archeology (parts 1 and 11)*. 1954, Berkeley, University of California Archaeological Survey Reports 24, 25.
- 5 Norman L. Wilson and Arlean H. Towne, *Nisenan*. 1978, Washington D. C., in: *California*, edited by Robert F

The Nisenan were socially integrated at the village or community group level, with the group participating in the decision-making process.⁶ The villages would range in size from 15 to 25 people to, at least in the Valley Nisenan, villages of over 500 people.⁷ A very large settlement consisted of a major village and associated smaller camps, whether general or specialized in nature. A headman, respected by all, residing in the major village had the authority to call upon the smaller associated groups in times of need, although the smaller groups did not have to always obey.

Major villages were located along main stream channels wherever a relatively high spot could be found to provide some protection from flooding. Over the years, the build-up of soil within the villages resulted in large midden mounds characteristic of Central Valley archeological sites. Satellite encampments and special use sites took advantage of smaller high spots, if necessary, or were only used in the dry seasons. In general, the Nisenan were intimately familiar with the potential of the land in their territory and took full advantage of all of the natural resources that could be utilized within the limits of their technology. The major stream courses were the most densely populated, but there was no area that was not used at all.

Most Nisenan never left the territory used by their own village group. However, there were, in most large villages, at least some individuals who engaged in rather extensive trade with several valley and Sierra groups, such as the Washo.

The time depth of the Nisenan presence in the Central Valley is open to conjecture. Many archeologists feel that the Early-Middle Horizon transition represents the Nisenan entry, but others would place it earlier or later. The Nisenan say they have "always" been here.

Historical Background

The Euro-American history of the project area relates almost entirely to agriculture and ways of improving the agricultural potential of the area. The first step in this process was to control flooding. The project area lies within the American Basin. In 1861, the entire American Basin was established as Reclamation District 1 and construction began on river levees in 1863. These levees had little impact on flooding, and the American Basin continued to fill with water nearly every year.

The effect of the annual flooding severely limited the uses of the land. Seasonal grazing and agriculture were possible on the high ground along the river, the eastern edge of the American Basin and other areas not covered with tules or other marsh plants. Much of the project area would have been subject to annual flooding.

Early maps and other sources indicate that some of the land along the rivers was sold to private individuals by the state as soon as the land was surveyed (by extending the federal survey of township, range, and section into the swamplands) beginning in the mid-1850s. Most of the rest of it was sold in the period from 1868 to 1871. From this time, much of the land was held in large

-
- 6 Heizer, Handbook of North American Indians. vol. 8, William G. Sturtevant, general editor, pp 387-397.
Wilson, Norman L. and Arlean H. Towne, Nisenan, In *California*, edited by Robert F Heizer, pp. 387-397, Handbook of North American Indians, vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C., 1978.
- 7 Alfred L. Kroeber, *Handbook of the Indians of California*, 1925, Washington D. C., Bureau of American Ethnology Bulletin 78. Smithsonian Institution: 821.

were to members of the United Auburn Indian Community of the Auburn Rancheria. John Suehead, of the Tribal Historic Preservation Committee replied for the group as a whole, that they had no knowledge of specific resources in the project area and no special concerns (see Appendix J).

Field Survey

Because the previous field inspections were quite old, a reconnaissance survey of the project area was conducted to determine if any changes had occurred in the intervening years that might have revealed previously overlooked resources. This inspection indicated that the bulk of the project areas has been used for agricultural use, including plowing and discing, and little other impact. The work was performed by Robert Gerry of Peak & Associates in April of 2001 with a follow-up in July. Three transects were walked across the agricultural lands as a check on previous work, but no cultural resources were identified. The area where an isolated artifact was reported (and collected) by Chavez (1985) was inspected, but no additional artifacts were observed.

Summary

Previous surveys, literature research, public contacts and a follow-up field inspection all indicate that no significant resources are known or anticipated in the project area. Although the project area is within the boundaries of a significant historic landscape listed on the NRHP, it is a non-contributing element within the district. The single prehistoric artifact that was observed in the project area has been collected and is no longer present.

REGULATORY CONTEXT

The treatment of cultural resources is governed by federal, State, and local laws and regulations. There are specific criteria for determining whether prehistoric and historic sites or objects are significant and/or protected by law. Federal and State significance criteria are concerned with the resource's integrity and uniqueness, its relationship to similar resources, and its potential to contribute important information to scholarly research.

Federal

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historic Preservation Act (NHPA) of 1966. Section 106 of NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementations regulations "Protection of Historic Properties" are found in 36 Code of Federal Regulations (CFR) Part 800. The National Register of Historic Places (NRHP) includes districts, sites, buildings, structures, and objects with local, regional, state or national significance. The definition of historic properties includes "any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in the National Register." The U.S. Department of the Interior regulations describe the National Register criteria for listing as the following:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design,

setting, materials, workmanship, feeling, and association, and (a) that are associated with events that have made a significant contribution to the broad patterns of our history; (b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or (d) that have yielded or may be likely to yield, information important in prehistory. [36 CFR § 60.4]

State

The State Historic Preservation Office (SHPO) maintains the California State Register of Historic Resources. An historic resource is deemed to be a significant resource if it is listed on the California Register of Historic Resources (CRHR). Properties listed on the NRHP are automatically listed on the CRHR. However, the CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

Section 21084.1 of the Public Resources Code states that a project that may cause a substantial adverse change in the significance of an historical resources is a project that may have a significant effect on the environment. Historical resources are defined in Section 5020.1(k) and criteria for identification of a historical resource are identified in Section 5024.1(g), as stated below. For purposes of this section, an historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources. Historical resources included in a local register of historical resources, as defined in subsection (k) of Section 5020.1 are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in the local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 does not preclude a lead agency from determining whether the resource may be an historic resource for purposes of this section.

Section 5020.1(k)

“Local register of historic resources” means a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.

Section 5024.1(g)

A resource identified as significant in an historical resource survey may be listed in the California Register if the survey meets all the following criteria:

- (1) The survey has been or will be included in the State Historic Resources Inventory.
- (2) The survey and the survey documentation were prepared in accordance with office procedures and requirements.
- (3) The resource is evaluated and determined by the office [of Historic Preservation] to have significance rating of Category 1 to 5 on DPR Form 523.
- (4) If the survey is five or more years old at the time of its nomination for inclusion in the California Registry, the survey is updated to identify historical resources which have become eligible or ineligible

due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource.

Local

City of Sacramento

Sacramento's Preservation of Historic Structures Ordinance establishes a Design Review and Preservation Board (Preservation Board) to inventory "essential structures," "priority structures," and "preservation areas" within Sacramento. The Preservation Board has authority to regulate the approval of building permits, structure relocation, and structure demolition relevant to inventoried structures or preservation areas. The regulations aim to preserve, so far as possible, historic structures and districts with special historic and architectural worth.¹²

IMPACTS AND MITIGATION

Method of Analysis

The cultural resources assessment involved several phases. First, pre-field research established a cultural history for the project area so that any resources identified in the project area could be evaluated in regional context. This involved consulting standard texts and Peak & Associates own reports on work that was completed nearby. The North Central Information Center of the California Historical Resources Information System was consulted for information on previous studies and recorded sites, and the Native American Heritage Commission was contacted to determine if sites listed on their sacred lands inventory were present in or near the project area and to obtain a list of knowledgeable Native Americans who could be contacted for additional information. Letters were written to these individuals asking for any information they could contribute regarding Native American use of the project area. Upon completion of the research tasks, a complete reconnaissance survey of the project was undertaken to identify any cultural resources, significant or not, within the project area.

Standards of Significance

For the purposes of this EIR, an impact is considered significant if the Proposed Project or alternatives would:

- Damage or destroy subsurface historic or prehistoric resources, including a paleontological or unique geologic feature.

12 City of Sacramento, *City of Sacramento General Plan Update Draft Environmental Impact Report*, March 1987, page V-3.

Impacts and Mitigation Measures

Impact

7.9-1 Historic resources. (Project-specific)

There are no existing structures on the project site. As described under “Historical Background” above, no contributing element of the RD 1000 historic district is in the Proposed Project area. Construction of the Proposed Project would not result in the alteration or disturbance of historic resources, so *no impact* would occur.

Mitigation

7.9-1 Historic resources. (Project-specific)

No mitigation would be required for the Proposed Project.

Impact

7.9-2 Archaeological resources. (Project-specific)

No archaeological or prehistoric resources are known to exist in the project area. The only suggestion that there could be such resources, as yet unidentified, is the presence of isolated artifacts in the vicinity, as documented by Chavez. The Information Center, in reply to the records search request, stated the following:

Chavez noted two artifacts, however, one within the project (#9: Bowl Mortar) and another just outside (#6: Bowl Mortar rim fragment). This suggests the possibility that there was an early site somewhere in the local vicinity.

This potential impact is the only one known for the Proposed Project area. A surface inspection can rarely be entirely certain that no buried archaeological or prehistoric resource is present within a project area. In the case of the Proposed Project, annual flooding prior to implementation of RD 1000 and agricultural practices since that time could have obscured surface evidence of an archeological site while leaving an intact or partially intact subsurface deposit. Therefore, this is considered a *potentially significant impact*.

Mitigation

7.9-2 Archeological Resources. (Project-specific)

Implementation of the following mitigation measure would reduce the magnitude of this impact for the Proposed Project to a *less-than-significant level*.

Should artifacts, exotic rock, bone, or a concentrated deposit of shell be uncovered during any future construction activities, an archeologist shall be consulted for an on-the-spot evaluation. If bone is uncovered that appears to be human, the County Coroner shall be contacted. If the coroner

determines that the bone is likely to be Native American in origin, then the Native American Heritage Commission shall be contacted to identify most likely descendants.

Impact

7.9-3 Loss of historic or archeological resources. (Cumulative)

Implementation of the Proposed Project would not result in the loss of historic resources because there are no existing historic structures on the site. As stated under Impact 7.9-2, no archeological resources are known to exist in the area. Because the potential presence of resources on the project site is small, implementation of the Proposed Project would result in a *less-than-significant cumulative impact*.

Mitigation

7.9-3 Loss of historic or archeological resources. (Cumulative)

No mitigation would be required for the Proposed Project.

REFERENCES

- Beardsley, Richard K., Temporal and Areal Relationships in Central California Archeology (parts 1 and 11), *University of California Archaeological Survey Reports* 24, 25, Berkeley, 1954.
- Bennyhoff, James A. and Richard E. Hughes, Shell Beads and Ornament Exchange Networks between California and the Great Basin, In *The Archaeology of Monitor Valley, 5: Regional Synthesis and Implications*, by David H. Thomas, *Anthropological Papers of the American Museum of Natural History*, New York, 1984.
- Bradley, Denise and Michael Corbett, *Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California*, Ms. on file, U.S. Army Engineer District, Sacramento, Corps of Engineers, 1996.
- Chavez, David, Cultural Resources Evaluations for the North Natomas Community Plan Study Area, Sacramento, California, Ms. on file, North Central Information Center, 1985.
- Kroeber, Alfred L., Handbook of the Indians of California, *Bureau of American Ethnology Bulletin* 78, Smithsonian Institution, Washington D.C., 1925.
- Lillard, Jeremiah B., Robert F. Heizer and Franklin Fenenga, An Introduction to the Archaeology of Central California, *Sacramento Junior College, Department of Anthropology Bulletin* 2, Sacramento, 1939.
- Lillard, Jeremiah B. and William K. Purves, The Archeology of the Deer Creek-Cosumnes Area, Sacramento County, California, *Sacramento Junior College, Department of Anthropology Bulletin* 1, Sacramento, 1936.
- Moratto, Michael J., *California Archaeology*, Academic Press, New York, 1984.
- Peak, Melinda, Historic American Engineering Record: Reclamation District 1000, HAER No. CA-187, Ms. on file, North Central Information Center, 1997.
- Schenck, W. Egbert and Elmer Dawson, Archaeology of the Northern San Joaquin Valley, *University of California Publications in American Archaeology and Ethnology* 25(4):289-413, Berkeley, 1929.
- Schulz, Peter D., *Osteoarchaeology and Subsistence Change in Prehistoric Central California*, Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis, 1981.
- Wilson, Norman L. and Arlean H. Towne, Nisenan, In *California*, edited by Robert F Heizer, pp. 387-397, Handbook of North American Indians, vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C., 1978.



8. CEQA CONSIDERATIONS



8.0 CEQA CONSIDERATIONS

ALTERNATIVES

The primary intent of the alternatives evaluation in an EIR, as stated in section 15126.6(a) of the CEQA Guidelines, is to “describe a range of reasonable alternatives to the project, or to the location of the project, which would 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.” Further, the Guidelines state that “the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.” An EIR must describe a range of reasonable alternatives to the Proposed Project (or to its location) that could feasibly attain most of the basic objectives of the project. The feasibility of an alternative may be determined based on a variety of factors including, but not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control (CEQA Guidelines section 15126.6(f)(1)).

Chapter 4, Alternatives to the Proposed Project, of this EIR includes a description of alternatives to the project that would reduce or avoid any significant impacts identified in this EIR. Each environmental issue is evaluated for all of the alternatives.

GROWTH-INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines requires that the EIR discuss the growth-inducing impacts of the Proposed Project. Specifically, CEQA states:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Growth-inducing impacts can result from development that directly or indirectly induces additional growth pressures that are more intense than what is currently planned for in general and community plans. An example of this would be the redesignation of property planned for agricultural uses to urban uses. The growth inducement that could result, in this example, would be the development of services and facilities that could encourage the transition of additional land in the vicinity to more intense urban uses. This example does not apply to the project site.

The project site is located in an urban area with both developed and planned retail and light-industrial uses nearby and adjacent to the site. The project would tie into the City's water system and the County's sanitation system. The addition of this project would not require the expansion of the City's Water Treatment Plant or the Sacramento Regional Wastewater Treatment Plant. The Proposed Project does not include any residential development so no new population would be added. The uses proposed are essentially consistent with the City's desire to see employment generating uses on the site. Employees generated by the project could be accommodated within the NNCP or within the City and County of Sacramento. Because no new population is being created, it is anticipated that existing community services would not be adversely affected. Because the uses in the Proposed Project are similar in nature and intensity to the existing land use designations set forth in the North Natomas Community Plan and Sacramento General Plan Update, and because the project is located in an area slated for development, it is not considered growth-inducing as defined by CEQA.

CUMULATIVE IMPACTS

CEQA Guidelines section 15130 requires that an EIR discuss the cumulative and long-term effects of the Proposed Project that adversely affect the environment. The CEQA Guidelines defines cumulative impacts as an impact that is created as a result of the effect of the project evaluated in the EIR, combined with related effects of other projects.

The Proposed Project, in conjunction with development in the vicinity of the project site and within the region, would not contribute considerably to cumulative environmental impacts. This project's contribution to cumulative development is assumed to be within the anticipated buildout planning horizon of the City of Sacramento General Plan.

Cumulative Context

Transportation and Circulation

The analysis of transportation and circulation under cumulative conditions focuses on year 2025 conditions. The project would not cause additional cumulative impacts beyond those already identified for baseline conditions in the areas of bikeways, pedestrian circulation, parking, and traffic circulation and safety.

Cumulative conditions were analyzed to determine the effect of the project in combination with the effects of buildout of the North Natomas Community Plan and other reasonably foreseeable projects in the area. Cumulative traffic volumes were taken from the SACMET 2025 model, developed for the North Natomas area. This model reflects the North Natomas Community Plan and approved land use changes in the North Natomas area. The traffic volume forecasts for cumulative conditions assume full build-out of the community, which is likely to be a conservative assumption.

Cumulative conditions were analyzed to determine the effect of the Proposed Project in combination with the effects of buildout of the North Natomas Community Plan and other reasonably foreseeable projects in the area. Cumulative traffic volumes were taken from the SACMET 2025 model, developed for the North Natomas area. This model reflects the North Natomas Community Plan and approved land use changes in the North Natomas area. The traffic

volume forecasts for cumulative conditions assume full build-out of the community, which is likely to be a conservative assumption. Please see page 7.2-37 in section 7.2, Transportation and Circulation, for more detailed discussion of the cumulative assumptions. Tables 7.2-16 and 7.2-17 (see pages 7.2-41 through 7.2-43) identify those intersections where cumulative impacts would occur. Significant cumulative impacts would occur at a total of 13 intersections. Tables 7.2-18 and 7.2-19 identify cumulative impacts to I-80.

Air Quality

The cumulative context for the air quality analysis includes development within the Sacramento Valley Air Basin through the year 2025. Because the region is designated as severe non-attainment for ozone, the Proposed Project would contribute considerably to a significant cumulative increase of criteria air pollutants (see Impact 7.3-5). The Proposed Project would result in CO emission levels below the 20 ppm 1-hour standard and the 9 ppm 8-hour standard, and would result in a less-than-significant cumulative impact (see Impact 7.3-6). With implementation of the Proposed Project, diesel powered trucks would be used to deliver and distribute materials goods associated with development of the site. Diesel particulate matter is a unique toxic air contaminant (TAC) in that it is generated by mobile sources. Although the Proposed Projects individual contribution to diesel particulate matter within the area would be minimal, development of the Proposed Project, in combination with other development in the region, could still expose employees to a substantial risk that is greater than the adopted 10 in 1 million threshold, and the cumulative contribution to TAC concentrations would be significant (see Impact 7.3-7).

Noise

The cumulative context for the noise analysis is buildout under the Sacramento General Plan. Increased traffic generated by the development of the Proposed Project would cause traffic noise levels to increase on the local roadway network. The extent by which existing land uses are affected by these increases will depend on their proximity to the roadways in question as well as their individual sensitivity to noise. Because no mitigation measures are available to reduce this impact, the project's cumulative contribution would be significant (see Impact 7.4-4).

Public Services

The cumulative context for the public services analysis is buildout under the City of Sacramento General Plan. The Proposed Project would not cause a population increase in the North Natomas area, and therefore would result in a less-than-significant cumulative contribution to the need for additional police services (see Impact 7.5-2) and fire services (see Impact 7.5-4).

The Proposed Project would result in a cumulative demand for water (see Impact 7.5-7). Implementation of Mitigation Measure 7.5-7 would reduce this cumulative impact to a less-than-significant level. The Proposed Project would result in a less-than-significant cumulative increase in demand for water treatment or infrastructure (see Impact 7.5-8) and a less-than-significant cumulative increase in demand for wastewater treatment and infrastructure (see Impact 7.5-10).

The projected electricity demand for the Proposed Project would be served by existing supplies and distribution lines, and would not cause a substantial cumulative increase in energy demand for the North Natomas area of the City of Sacramento (see Impact 7.5-12). The Proposed Project, in

combination with other projects in North Natomas and the City of Sacramento, would result in a less-than-significant cumulative contribution to increases in solid waste disposal (see Impact 7.5-14).

Public Health/Hazards

The cumulative context for hazardous materials-related impacts is the area within the boundaries of the City of Sacramento General Plan. Because of existing federal, state, and local regulations overseeing the use of hazardous materials, the cumulative impact would be less than significant (see Impact 7.6-5).

Hydrology and Water Quality

The cumulative context for hydrology and water quality issues is the RD 1000 area tributary to the Sacramento River in the Lower Sacramento watershed. Sufficient capacity exists in the RD 1000 system to convey the flows from the North Natomas area, and the cumulative impact would be less than significant (see Impact 7.7-3).

Biological Resources

The cumulative context for biological resources is buildout of Sacramento County. Because of the project's contribution to significant ongoing regional and statewide habitat losses, the cumulative impact would be significant and unavoidable (see Impact 7.8-6).

Cultural Resources

The cumulative context for the cultural resources analysis includes buildout under the City of Sacramento General Plan. Implementation of the Proposed Project would not result in a considerable cumulative contribution to the loss of historic or archaeological resources (see Impact 7.9-3).

Significant Cumulative Impacts

Implementation of the Proposed Project would result in the following significant cumulative impacts:

- Cumulative increase in traffic volumes;
- Cumulative increase in traffic-related noise levels;
- Cumulative generation of criteria air pollutants;
- Cumulative contribution to TAC concentrations; and
- Cumulative loss of biological resources.

IRREVERSIBLE (UNAVOIDABLE) ENVIRONMENTAL IMPACTS

The State CEQA Guidelines mandate that an EIR address any significant irreversible environmental changes which would be involved in the proposed action should it be implemented (State CEQA Guidelines, section 15126.2 subd.(c)). An impact would fall into this category if:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project or;
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Determining whether the Proposed Project would result in significant irreversible environmental changes requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them.

Implementation of the Proposed Project would result in the irreversible commitment of certain natural resources. The most notable significant irreversible impacts are commitment of energy resources in the form of natural gas and electricity, increased generation of pollutants, and the short-term commitment of non-renewable and/or slowly renewable natural and energy resources such as lumber and other forest products, mineral resources, and water resources during construction of the project.

Cumulative development in Sacramento County (which includes the project site) would use substantial natural resources both during and after construction. During construction, fossil fuels and building materials (e.g., wood and aggregate) would be consumed. As construction of specific projects is completed, fossil fuels would be consumed by employee vehicle use, heating and cooling of buildings, and generation of electricity.

The use of these resources is an unavoidable consequence of development. The magnitude of this use would be partially offset by required compliance with Title 24 and other energy conservation measures and implementation of project-specific mitigation measure included in this EIR. Please see Chapter 7 for a more complete discussion of the effects of the Proposed Project on specific natural resources.

SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED

According to the State CEQA Guidelines (section 15126.2(b)), an EIR must include a description of those impacts identified as significant and unavoidable should the proposed action be implemented. Such impacts are unavoidable because it has been determined that either no mitigation, or only partial mitigation is feasible, without imposing an alternative design on the project. The mitigation measures identified in this EIR would reduce the significant impacts of the Proposed Project to a less-than-significant level. Implementation of the Proposed Project would result in the following significant and unavoidable impacts:

- Cumulative increase in traffic volumes;

- Increase in ROG and NO_x emissions;
- Increase in construction-related ozone precursor emissions;
- Cumulative generation of criteria air pollutants;
- Increased project-specific and cumulative traffic-related noise levels;
- Cumulative contribution to TAC concentrations; and
- Cumulative loss of biological resources.

Implementation of the project alternatives would result in the following significant unavoidable impacts:

- Construction-related PM₁₀ emissions (Alternative 4)
- Increase in ROG and NO_x emissions (Alternatives 2, 3 and 4)
- Construction-related ozone precursor emissions (Alternatives 2, 3 and 4)
- Cumulative generation of criteria air pollutants (Alternatives 2, 3 and 4)
- Increased project-specific and cumulative traffic related noise levels (Alternatives 2 and 3)
- Project-specific and cumulative increased demand for police protection services (Alternative 4)
- Cumulative contribution to TAC concentrations (Alternatives 2, 3 and 4)
- Creation of a health hazard due to exposure of contaminated soil and/or groundwater (Alternative 4)
- Project-specific and cumulative increases in the rate of stormwater runoff from the project site (Alternative 4)
- Cumulative loss of biological resources (Alternatives 2, 3 and 4)
- Project-specific and cumulative loss of archaeological resources (Alternative 4)

9. EIR AUTHORS AND PERSONS CONTACTED

9. EIR AUTHORS AND PERSONS CONTACTED

CITY OF SACRAMENTO

Planning and Building Department

Environmental Planning Services Division

EIR Project Manager

Grace Hovey

Department of Public Works

Development Services

Steve Pyburn

EIP ASSOCIATES

Project Director
Project Managers
Deputy Project Manager

Adrienne L. Graham, AICP
Christine Kronenberg, AICP
Amanda Schramm

EIR AUTHORS

Land Use, Planning, and Socioeconomic Effects	Christine Kronenberg, EIP Associates
Population, Employment and Housing	Jennifer Hageman, EIP Associates
Transportation and Circulation	Mark Bowman, Dowling Associates
Air Quality	Anna Price, EIP Associates
Noise	Paul Bollard, Bollard & Brennan Acoustical Consulting
Public Service and Utilities	Amanda Schramm, EIP Associates
Public Health/Hazards	Mark Nordberg, Alice Tackett, EIP Associates
Geology and Soils	Mark Nordberg, Alice Tackett, EIP Associates
Hydrology and Water Quality	Mark Nordberg, Alice Tackett, EIP Associates
Biological Resources	Mark Genaris, EIP Associates
Cultural Resources	Robert Gerry, Peak and Associates
Word Processing	Alta Cunningham, Kristine Olsen, EIP Associates
Production	James Garrett, EIP Associates
Graphics	Mark Biegaj, Josh Schramm, EIP Associates

PERSONS CONTACTED

Christoph Dobson, Senior Civil Engineer, County of Sacramento, Department of Water Quality.

Dan Mount, Water Services Superintendent, City of West Sacramento.

Dave Schamber, Supervising Engineer, City of Sacramento Department of Utilities.

Gary Gossi, City of Sacramento Department of Utilities.

Gary Van Dorst, City of Sacramento Department of Public Works.

Gene Hoppes, Engineering Designer 4, Sacramento Municipal Utilities District.

Greg Fabun, Assistant to the Public Works Director, City of West Sacramento.

Hal Hackney, Gas Planning Engineer, PG&E.

Jim Hyde, City of Sacramento Police Department.

Kathy Mullen, Water and Sewer Superintendent, City of Sacramento Department of Utilities.

Kurt McCray, Crime Prevention Specialist, Sacramento Police Department.

Mike Maggi, Principal Engineer, City of Sacramento Water Quality Department.

Mike Root, Waste Reduction Coordinator, City of Sacramento

Patrick Stiehr, Watermark Engineering, Inc.

Penny Misselli, Administrative Analyst, West Sacramento Police Department.

Raymond Ambriz, Administrative Analyst, City of Sacramento Fire Department.

Rhonda Mitchell, Personnel Transaction Coordinator, Sacramento Police Department.

Rick Jones, Captain, Sacramento Police Department.

Stan Dean, Plant manager, Sacramento Regional Wastewater Treatment Plant.

SummerMoore, Senior Clerk, West Sacramento Fire Department.

10. LIST OF ACRONYMS AND ABBREVIATIONS



10. LIST OF ACRONYMS AND ABBREVIATIONS

LIST OF ACRONYMS AND ABBREVIATIONS	
Acronym	Definition
AB	Assembly Bill
ADT	average daily traffic
AFY	acre-feet per year
ANSI	American National Standards Institute
AQMD	Air Quality Management District
ARP	Accidental Release Protection
BACT	Best Available Control Technology
BMP	Best Management Practices
BTU	British Thermal Units
CalTrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDP	Comprehensive Drainage Plan
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CIS	Company Inspection System
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Natives Plant Society
CO	carbon monoxide
CSD-1	County Sanitation District 1
CUPA	Certified Unified Program Agency
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEIR	Draft Environmental Impact Report
DFG	Department of Fish and Game
DTSC	Department of Toxic Substances Control
EA	Environmental Assessment
EC	Employment Center
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPS	Economic & Planning Systems, Inc.
ERA	Economic Research Associates
ESA	Environmental Site Assessment
FCAA	Federal Clean Air Act
FCAA	Federal Clean Air Act
FESA	Federal Endangered Species Act

LIST OF ACRONYMS AND ABBREVIATIONS	
Acronym	Definition
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
HCP	Habitat Conservation Plan
HRA	health risk assessment
HWCL	Hazardous Waste Control Law
Hz	Hertz
ISO	Insurance Service Organization
ITP	Incidental Take Permit
IWMB	Integrated Waste Management Board
kV	kilovolts
kW	kilowatts
LDL	Larson Davis Laboratories
L _{dn}	day-night average noise level
Leq	energy equivalent noise level
L _{max}	maximum instantaneous level
L _{min}	minimum instantaneous level
LOS	level of service
M-1	Light Industrial Zoning Designation
MACT	Maximum Available Control Technology
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MMP	Mitigation Monitoring Plan
MSL	Mean Sea Level
NAAQS	National Ambient Air Quality Standards
NADA	National Automobile Dealers Association
NAHC	Native American Heritage Commission
NEMD	Natomas East Main Drainage
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966
NNCP	North Natomas Community Plan
NOP	Notice of Preparation
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	ozone
OES	Office of Emergency Services
OSHA	Occupational Safety and Health Agency
PM ₁₀	respirable particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
POP	Problem-Oriented Police
PPM	parts per million
PRG	Preliminary Remedial Goals
PUD	Planned Unit Development
RCRA	Resource Conservation Recovery Act
RD	Reclamation District
RDE	Retail/Dining/Entertainment
RMP	Risk Management Plan

LIST OF ACRONYMS AND ABBREVIATIONS	
Acronym	Definition
ROC	Reactive Organic Compounds
ROG	Reactive Organic Gases
ROW	right of way
RWQCB	Regional Water Quality Control Board
SAAQS	State Ambient Air Quality Standards
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCEMD	Sacramento County Environmental Management Department
SC-PUD	Regional Commercial Zoning
SF	square feet
SFD	Sacramento Fire Department
SGP	Sacramento General Plan
SGPU	Sacramento General Plan Update
SHPO	State Historic Preservation Office
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO ₂	sulfur dioxide
SPD	Sacramento Police Department
SR	State Route
SRA	State Responsibility Area
SRCSD	Sacramento Regional County Sanitation District
SVAB	Sacramento Valley Air Basin
SWAT	Special Weapons and Tactics
SWPPP	Stormwater Pollution Prevention Program
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TMA	Transportation Management Association
TSCA	Toxic Substances Control Act
TSM	Transportation Systems Management
TTLC	Total Threshold Limit Concentration
UBC	Uniform Building Code
USFWS	U.S. Fish Wildlife Service
USGS	United States Geological Survey
VOC	volatile organic compound
WDR	Waste Discharge Requirements
WSFD	West Sacramento Fire Department
WSPD	West Sacramento Police Department
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant
YSAQMD	Yolo-Solano Air Quality Management District

Source: EIP Associates, January 2000.

11. BIBLIOGRAPHY

11. BIBLIOGRAPHY

- Alfred L. Kroeber, *Handbook of the Indians of California*, 1925, Washington D. C., Bureau of American Ethnology Bulletin 78. Smithsonian Institution: 821.
- Beardsley, Richard K., Temporal and Areal Relationships in Central California Archeology (parts 1 and 11), *University of California Archaeological Survey Reports* 24, 25, Berkeley, 1954.
- Bennyhoff, James A. and Richard E. Hughes, Shell Beads and Ornament Exchange Networks between California and the Great Basin, In *The Archaeology of Monitor Valley, 5: Regional Synthesis and Implications*, by David H. Thomas, *Anthropological Papers of the American Museum of Natural History*, New York, 1984.
- Bradley, Denise and Michael Corbett, *Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California*, Ms. on file, U.S. Army Engineer District, Sacramento, Corps of Engineers, 1996.
- California Air Resources Board. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. Stationary Source Division, Mobile Source Control Division. October 2000, Appendix VII.
- California Department of Finance Website: <http://www.dof.ca.gov>.
- California Department of Finance Website: [http://www.dof.ca.gov/HTML/DEMOGRAP/State-County Summary](http://www.dof.ca.gov/HTML/DEMOGRAP/State-County%20Summary), website accessed 4/11/02.
- California Department of Finance Website:
<http://www.dof.ca.gov/HTML/DEMOGRAP/projco.pdf>, website accessed 4/11/02.
- California Department of Transportation Website:
<http://www.dot.ca.gov/hq/traffops/saferesr/terafdata/1999>. website accessed December 11, 2002.
- California Public Resources Code, Part 2, Chapter 2 (<http://www.leginfo.ca.gov>).
- California Regional Water Quality Control Board, Central Valley Region, *The Water Quality Control Plan (Basin Plan) [for] the Sacramento River Basin and the San Joaquin River Basin*, 4th Edition, 1998.
- Chris Richgels, Kiefer Landfill, personal communications, January 2000.
- City of Sacramento General Plan, January 1988, page 4-10.

City of Sacramento General Plan, March 1987, Exhibit R-2.

City of Sacramento Website: <http://cityofsacramento.org>.

City of Sacramento Website:

<http://cityofsacramento.org/planning/geoarea/phdata/natomas.htm>, website accessed 2/22/01.

City of Sacramento Website:

http://www.cityofsacramento.org/planning/geoarea/phdata/housing_cpa.htm.

City of Sacramento Website:

http://www.cityofsacramento.org/planning/geoarea/area4/natomas/proj_non.htm, website accessed 2/18/02.

City of Sacramento, *City of Sacramento General Plan Update Draft Environmental Impact Report*, March 1987.

City of Sacramento, Draft North Natomas Community Plan, amended April 16, 1996.

City of Sacramento, Draft Supplement to the North Natomas Community Plan EIR (SCH #93012011), March 1993, pp.4.7-11 and 4.7-14.

City of Sacramento, *El Centro Crossing Negative Declaration and Initial Study*, July 2002, page 77.

City of Sacramento, *North Delta Shores Mitigated Negative Declaration and Draft Initial Study*, March 2002, page 64.

City of Sacramento, North Natomas Community Plan, amended April 16, 1996.

City of Sacramento, North Natomas Community Plan, 1994.

City of Sacramento Stormwater Management Program's Website:

<http://www.sacstormwater.org/const/manuals/index.html>

City of West Sacramento, General Plan Background Report, June 2000, pp.VI-13 to VI-17.

City of West Sacramento, General Plan Final Environmental Impact Report, May 1990, pp. V-10 to V-13.

City of West Sacramento, Policy Document, revised and adopted June 14, 2000, Section VII, pg. II-81.

County of Sacramento, General Plan, Planning for the 21st Century, Public Facilities Element of the County of Sacramento General Plan, December 15, 1993.

- County of Sacramento, *Sacramento Regional County Sanitation District and Sacramento County Sanitation District No. 1, Sacramento Sewerage Expansion Study*, prepared by James M. Montgomery, April 1993, page 1-1.
- David Chavez, *Cultural Resources Evaluations for the North Natomas Community Plan Study Area*, 1985, Sacramento, unpublished report on file, North Central Information Center.
- Denise Bradley and Michael Corbett, *Final Rural Historic Landscape Report for Reclamation District 1000*, 1995, Sacramento, Report submitted to the U. S. Army Corps of Engineers.
- Economic Research Associates, *Regional Market Demand and Allocation in the North Natomas Area of the City of Sacramento, California*, revised March 20, 2000.
- Economic Research Associates, *Regional Retail Demand Attraction and Development by the City of Sacramento, California*, revised March 20, 2000.
- Greg Hoeger, City of Sacramento, written communication to Grace Hovey, City of Sacramento, November 5, 2002.
- <http://www.ciwmb.ca.gov/Landfills/Tonnage/2000/Landfill.htm>
- <http://www.ciwmb.ca.gov/SWIS/detail.asp?PG=DET&SITESCH=34-AA-0001&OUT=HTML>
- <http://www.ciwmb.ca.gov/SWIS/detail.asp?PG=DET&SITESCH=57-AA-0001&OUT=HTML>
- Inundation Map of Folsom and Nimbus Dam, July 1975, was viewed at the Internet site for the California Office of Emergency Services on April 10, 2002, at the following address:
<http://www.oes.ca.gov/dim.nsf>.
- Jeremiah B. Lillard, and William K. Purves, *The Archeology of the Deer Creek-Cosumnes Area, Sacramento County, California* 1936, Sacramento, Sacramento Junior College, Department of Anthropology Bulletin 1.
- Jeremiah B. Lillard,, Robert F. Heizer and Franklin Fenenga, *An Introduction to the Archaeology of Central California*, 1939, Sacramento, Sacramento Junior College, Department of Anthropology Bulletin 2.
- Kroeber, Alfred L., *Handbook of the Indians of California*, *Bureau of American Ethnology Bulletin 78*, Smithsonian Institution, Washington D.C., 1925.
- Lillard, Jeremiah B. and William K. Purves, *The Archeology of the Deer Creek-Cosumnes Area, Sacramento County, California*, *Sacramento Junior College, Department of Anthropology Bulletin 1*, Sacramento, 1936.
- Lillard, Jeremiah B., Robert F. Heizer and Franklin Fenenga, *An Introduction to the Archaeology of Central California*, *Sacramento Junior College, Department of Anthropology Bulletin 2*, Sacramento, 1939.

- McLaren/Hart, Inc., *Phase I Environmental Site Assessment Fong Ranch*, submitted to Opus West Corporation, September 27, 1999.
- Melinda A. Peak, *Historic American Engineering Record: Reclamation District 1000, HAER No. CA-187*, 1997, Sacramento.
- Moratto, Michael J., *California Archaeology*, Academic Press, New York, 1984.
- Norman L. Wilson and Arlean H. Towne, *Nisenan*. 1978, Washington D. C., in: *California*, edited by Robert F Heizer, *Handbook of North American Indians*. vol. 8, William G. Sturtevant, general editor, pp 387-397.
- Peak, Melinda, *Historic American Engineering Record: Reclamation District 1000, HAER No. CA-187*, Ms. on file, North Central Information Center, 1997.
- Richard K. Beardsley, *Temporal and Areal Relationships in Central California Archeology (parts 1 and 11)*. 1954, Berkeley, University of California Archaeological Survey Reports 24, 25.
- Sacramento Area Council of Governments Website:
<http://www.sacog.org/demographics/pophsg/cities/sac/Sacr.htm>.
- Sacramento Area Council of Governments Website: <http://www.sacog.org>.
- Sacramento Area Council of Governments Website:
<http://www.sacog.org/demographics/proj2001/pdf/cities/saccity.pdf>.
- Sacramento Area Council of Governments Website:
<http://www.sacog.org/demographics/proj2001/pdf/cities/saccity.pdf>, website accessed 3/15/01.
- Sacramento Metropolitan Air Quality Control District. Sacramento Area Regional Ozone Attainment Plant. November 15, 1994.
- Schenck, W. Egbert and Elmer Dawson, *Archaeology of the Northern San Joaquin Valley, University of California Publications in American Archaeology and Ethnology* 25(4):289-413, Berkeley, 1929.
- Schulz, Peter D., *Osteoarchaeology and Subsistence Change in Prehistoric Central California*, Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis, 1981.
- Susan Lindstrom, *A Preliminary Cultural Resource Evaluation of the Sacramento Regional Transit Systems Planning Study: Downtown Sacramento/Natomas/ Airport Route, Environmental Impact Report, Sacramento County*, 1990, Sacramento, unpublished report on file, North Central Information Center.
- U.S. Census Bureau, *Census 2000, Table DP-1, Profile of General Demographic Characteristics: 2000, Geographic Area: Sacramento City, California*.

United States Department of Agriculture, Soil Conservation Service, *Soil Survey of Sacramento County, California*, April 1993.

United States Geological Survey 7.5 Minute, Rio Linda, California topographic quadrangle map, 1967, Photo revised 1980.

Watermark Engineering, Inc., Drainage Master Plan for Promenade at Natomas (Fong Ranch), February 28, 2002.

Watermark Engineering, Inc., Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002.

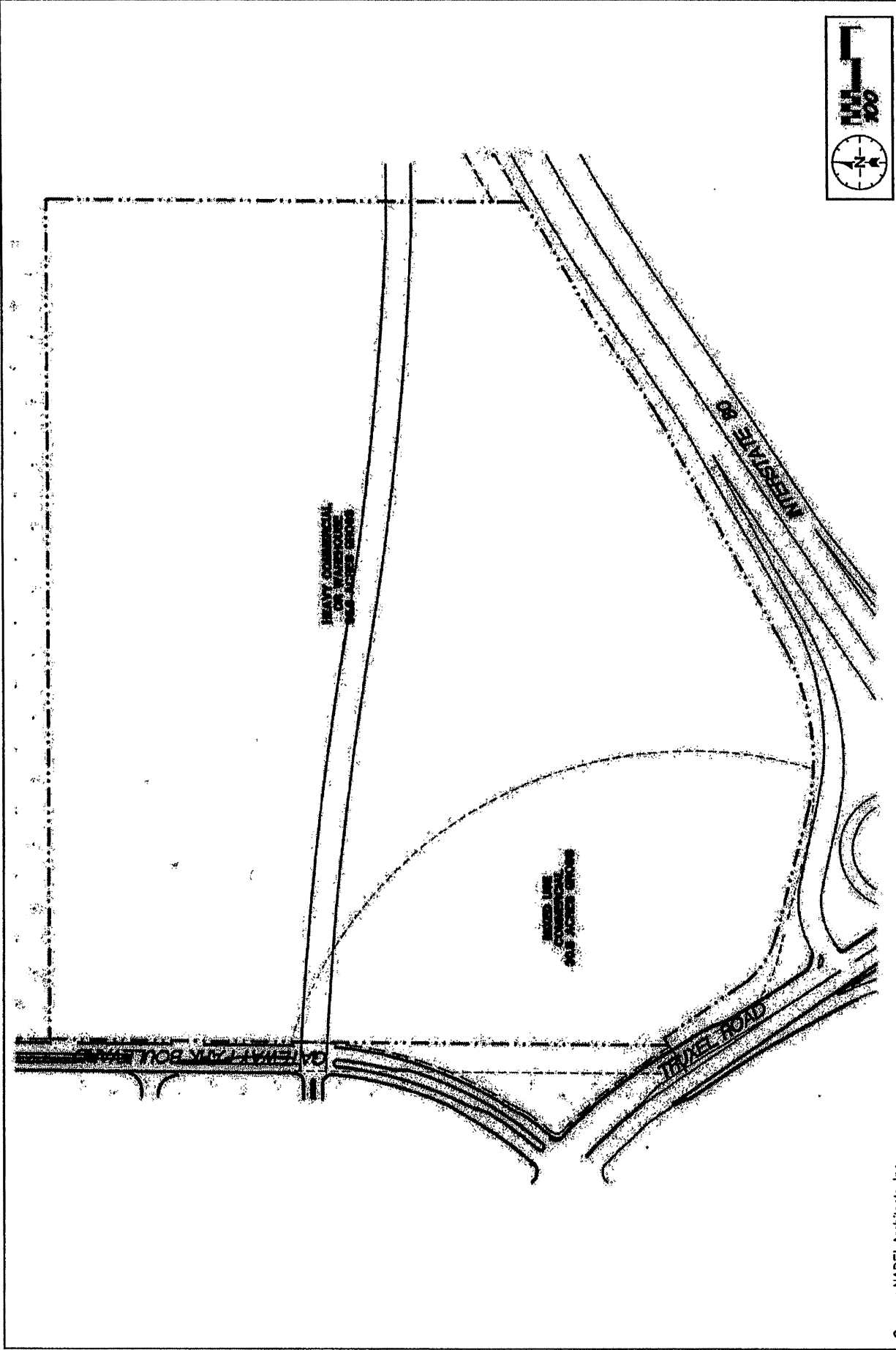
Wilson, Norman L. and Arlean H. Towne, Nisenan, In *California*, edited by Robert F Heizer, pp. 387-397, Handbook of North American Indians, vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C., 1978.



APPENDICES

Appendix 1

**Existing and Proposed General Plan, Zoning, Community Plan,
and Special Permit Graphics**



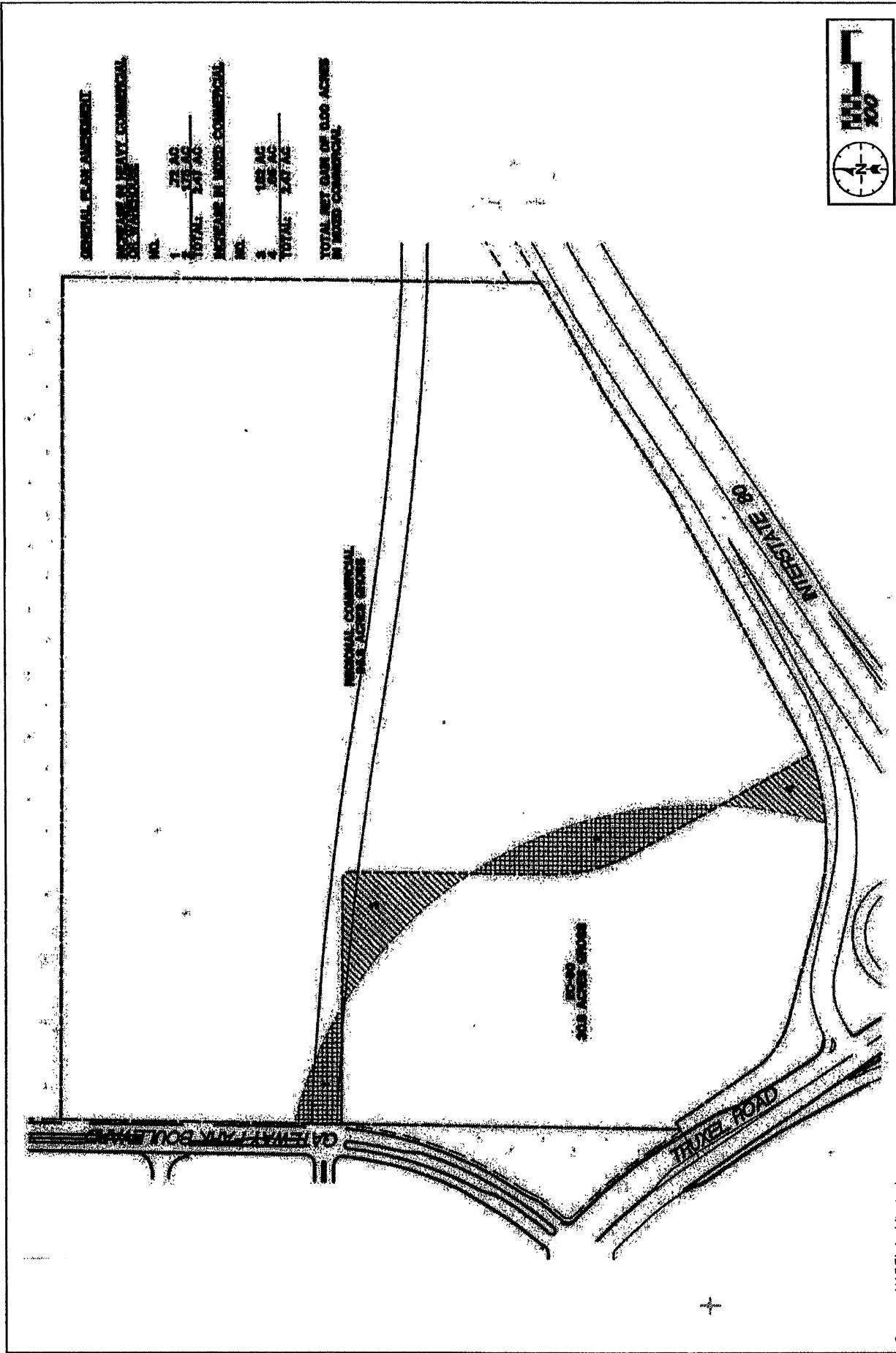
Source: NADEL Architects, Inc.

FIGURE A
 Site Plan – Existing General Plan



10483-01





GENERAL ZONING AMENDMENT:	
INCREASE IN MIXED COMMERCIAL USE ZONING	
NO.	ACRES
1	25 AC
TOTAL:	25 AC
INCREASE IN MIXED COMMERCIAL:	
NO.	ACRES
2	100 AC
3	200 AC
TOTAL:	300 AC
TOTAL NET GAIN OF 300 ACRES IN MIXED COMMERCIAL	

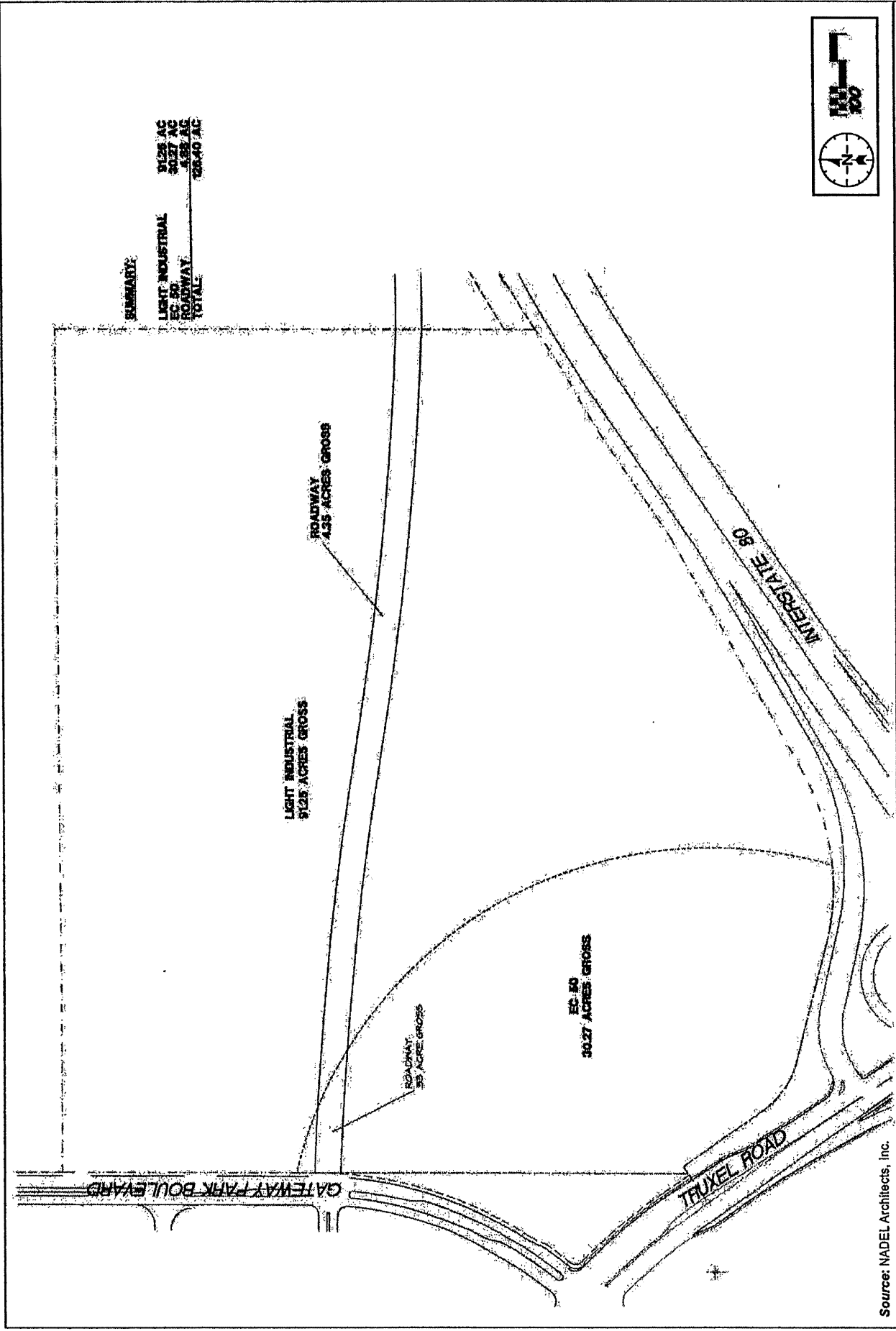


FIGURE B
Site Plan – Proposed General Plan

Source: NADEL Architects, Inc.



10483-01



Source: NADEL Architects, Inc.

FIGURE C
 Site Plan – Existing Community Plan



10483-01



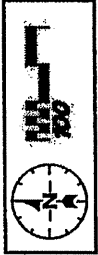
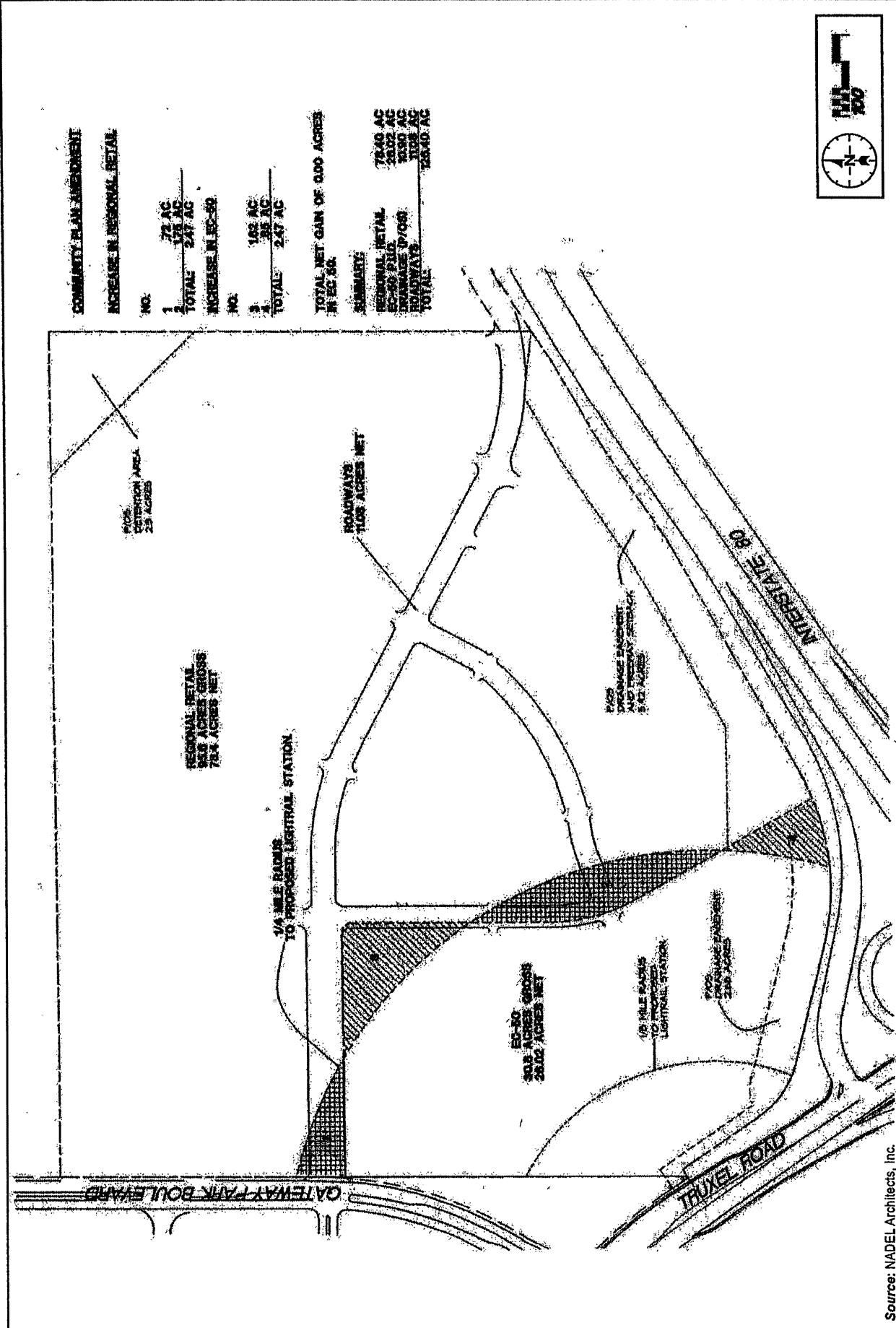


FIGURE D
 Site Plan – Proposed Community Plan

Source: NADEL Architects, Inc.



10483-01

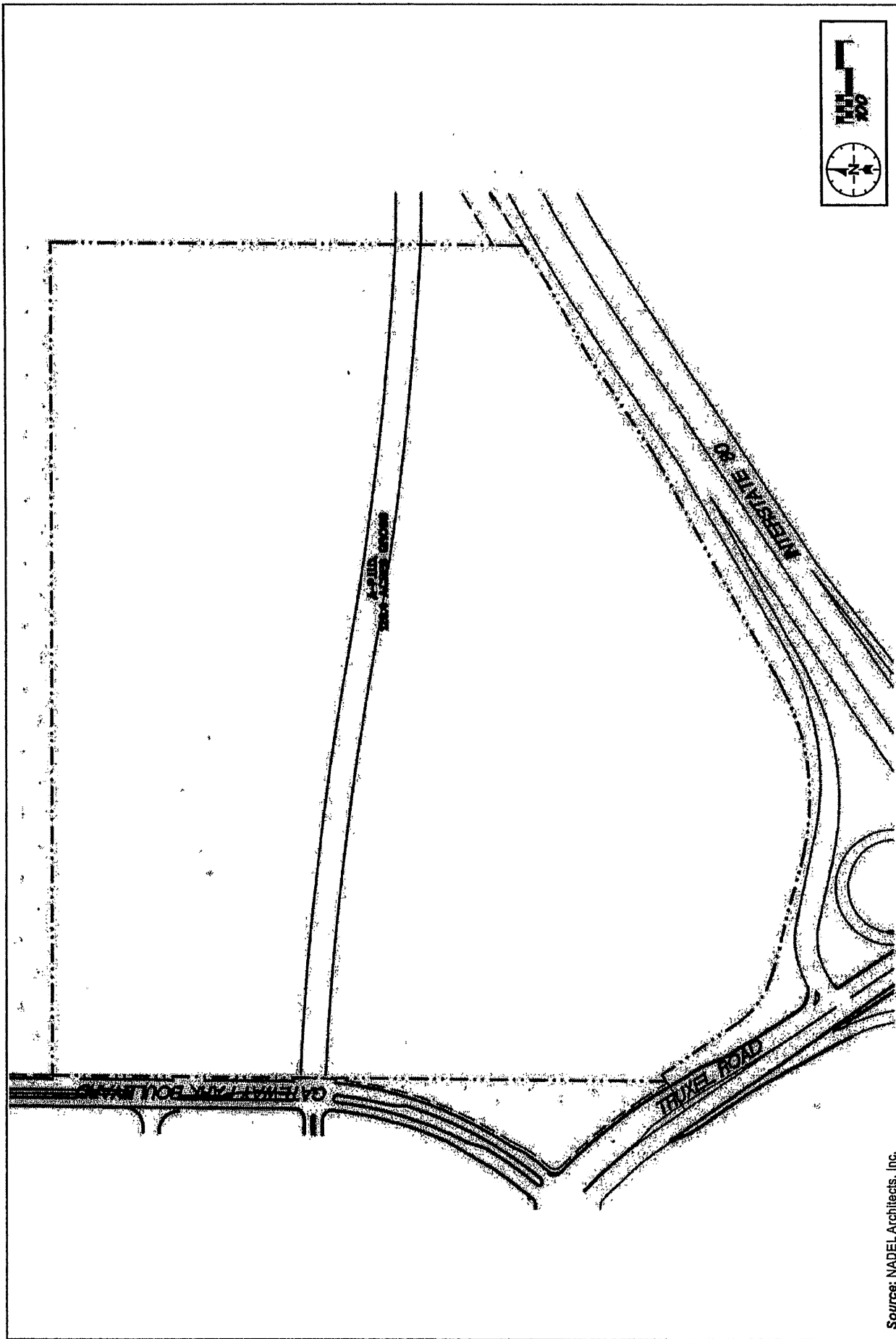
10

11

12

13

14



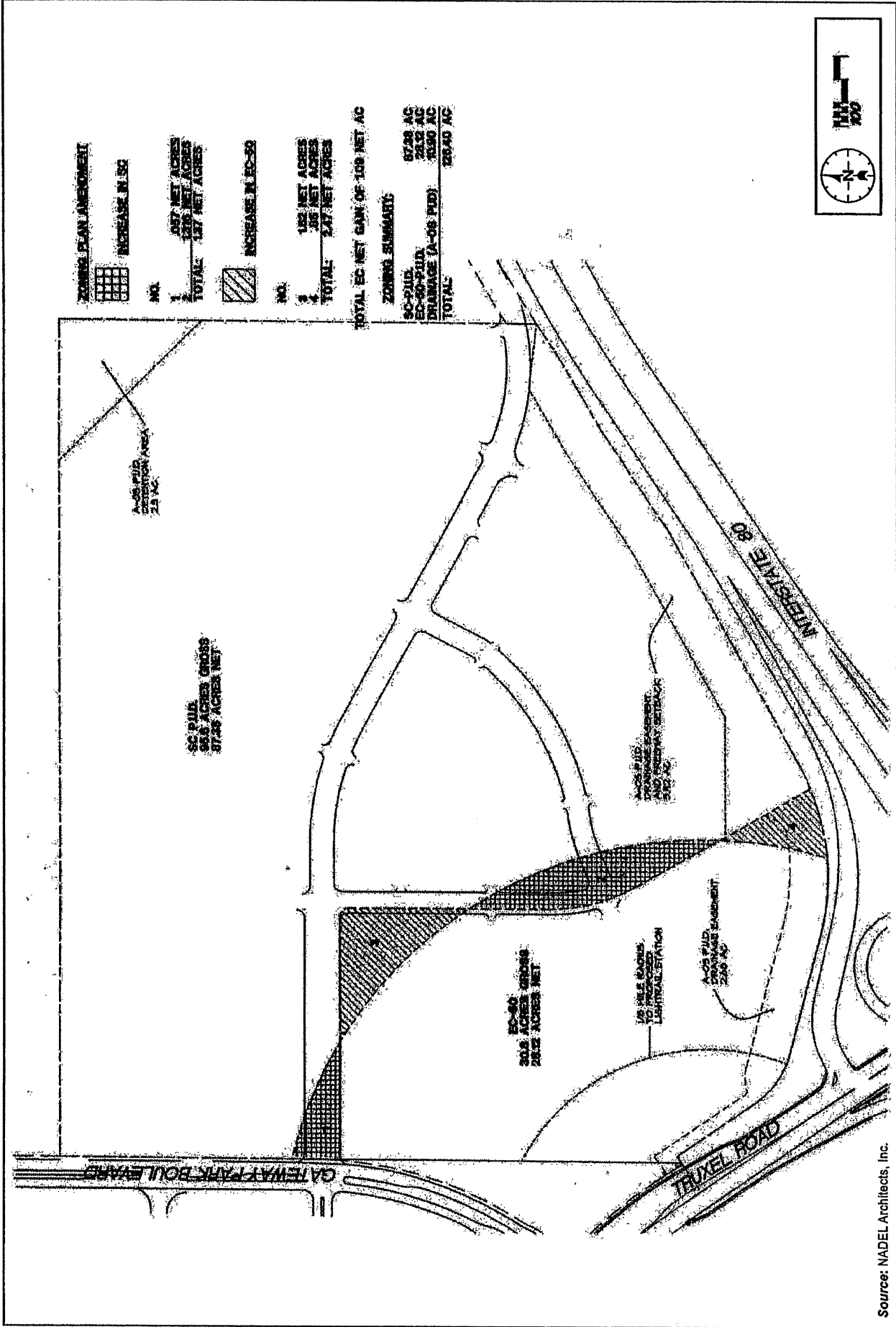
Source: NADEL Architects, Inc.

FIGURE E
 Site Plan -- Existing Zoning Plan



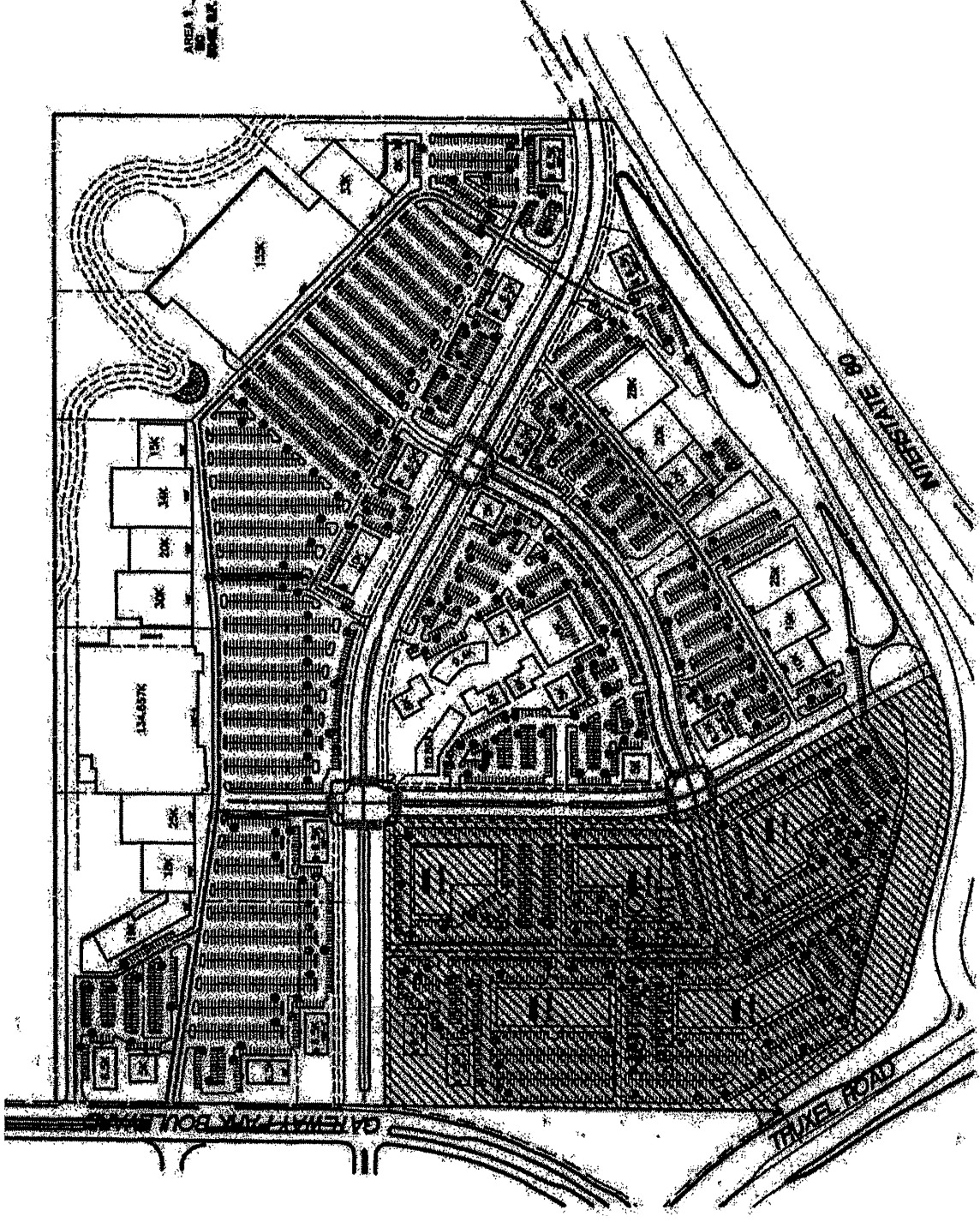
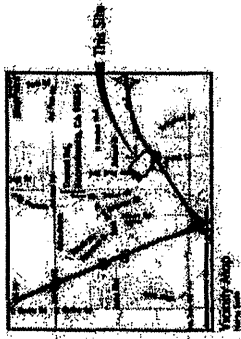
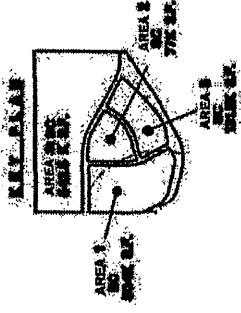
10483-01







Summary
Total Area: ±5,566,006 SF



Source: NADEL Architects, Inc.

FIGURE G
Special Permit Site Plan



10483-01



**PROMENADE AT NATOMAS
FINAL RECIRCULATED DRAFT
ENVIRONMENTAL IMPACT
REPORT**

(SCH# 2000072035)

Prepared for:

City of Sacramento
Sacramento, California

Prepared by:

EIP Associates
Sacramento, California

April 2004

**FINAL RECIRCULATED DRAFT ENVIRONMENTAL
IMPACT REPORT FOR THE PROMENADE AT NATOMAS**

Prepared for:

City of Sacramento

Prepared by:

EIP Associates

April 2004



TABLE OF CONTENTS



TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
1. INTRODUCTION AND LIST OF COMMENTORS.....	1-1
2. SUMMARY OF TEXT CHANGES	2-1
3. COMMENTS AND RESPONSES	3-1



1. INTRODUCTION AND LIST OF COMMENTORS

1.0 INTRODUCTION AND LIST OF AGENCIES/PERSONS COMMENTING

INTRODUCTION

This Final Recirculated Draft EIR (RDEIR) for the Natomas Promenade project (SCH#2000072035) contains the public and agency comments received during the extended public review period from December 15, 2003 through February 2, 2004.

Project Background

This RDEIR is an informational document intended to disclose to the City of Sacramento and the public the environmental consequences of approving and implementing the Natomas Promenade Project. All written comments received during the public review are addressed in this Final RDEIR.

Summary of Text Changes

The revisions to the RDEIR text, Chapter 2, identify all changes made to the document by subject matter section. These changes are either staff-initiated changes in response to comments made on the RDEIR or in response to public comments. Changes reflect minor alterations to the Project Description, Alternatives, Land Use and Planning, Socio-economic Effects, Population, Employment and Housing, Transportation and Circulation, and Biological Resources discussions. A minor revision was made to one of the mitigation measures in the traffic section. These text changes do not change the significance conclusions presented in the RDEIR.

Responses to Comments

Responses to comments appear in Chapter 3 of this Final RDEIR. Each comment letter is presented with brackets indicating how the letter has been divided into individual comments. Each comment is given a binomial with the number of the comment letter appearing first, followed by the comment number. For example, comments in Letter 1 are numbered 1-1, 1-2, 1-3, and so on. Immediately following the letter are responses, each with binomials that correspond to the bracketed comments.

List of Commentors

The following list identifies the public agencies and members of the public that commented on the RDEIR.

State Agencies

1. State of California Governor's Office of Planning and Research
2. State Department of Transportation, District 3

County Agencies

3. County Sanitation District - 1

Other Public Agencies

4. Regional Transit

Members of the Public

5. James B. Wiley and Kate A. Leary, Taylor & Wiley
6. Les Card, LSA
7. Christopher V. Holm
8. Suzanne Day

2. TEXT CHANGES TO THE RECIRCULATED DRAFT EIR

2.0 TEXT CHANGES TO THE RECIRCULATED DRAFT EIR

Introduction

This chapter presents minor corrections and revisions made to the RDEIR initiated by the public, staff, and/or consultants based on their on-going review. New text is indicated in underline and text to be deleted is reflected by a ~~strike through~~. Text changes are presented in the page order in which they appear in the RDEIR.

Chapter 1.0, Introduction

The first sentence in the first paragraph on page 1-1 is revised to read:

This recirculated Draft Environmental Impact Report (RDEIR) is prepared at the request of the City of Sacramento in response to changed conditions relating to the development of the Promenade at Natomas ~~Promenade~~ project (formerly the Promenade at Natomas/Sacramento Auto Loop project).

Chapter 2.0, Summary

The footnote reference in the last sentence in the first paragraph under Table 2-1 is revised to read:

The applicant is also seeking to rezone the site from A-PUD to EC-50 PUD³ and SC-PUD³.

Chapter 2.0, Summary, Table 2-3, Summary Table

Revisions to Table 2-3, Summary of Impacts and Mitigation Measures, are included at the end of this chapter.

Chapter 3.0, Project Description

The last sentence in the fourth paragraph on page 3-7 is revised to read:

In the future the ~~City~~ County is proposing to remove the temporary lift station and relocate the Northwest interceptor pipeline to the west side of the drainage canal.

The first sentence under Project Schedule on page 3-10 is revised to read:

It is anticipated that construction for the project would commence in the late spring early summer of 200~~3~~4.

Chapter 4.0, Alternatives

The following sentence is added to the bottom of page 4-4+21:

~~However, b~~Because this alternative encourages the development of a mix of regional retail and office uses it appears to be considered generally consistent with the intent of the applicable goals and policies set forth in the General Plan that encourage the development of these uses and in a location that would encourage light rail ridership. However, because the office uses are located in the northernmost portion of the site access to the proposed light rail stop would not be as convenient or accessible for these employees.

The following text is added after the second paragraph on 4-24:

As shown on Figure 4-2, the proposed office uses are located in the northern portion of the site not adjacent to the proposed light rail stop. Therefore, light rail transit would be less accessible and convenient for these employees.

The term “current zoning” was intended to signify Alternative B: No Project/Community Plan Buildout (AB) as defined in the April 2003 DEIR. The second and third paragraphs on page 4-25 are revised to read as follows:

The Retail/Mixed Use Alternative would generate approximately ~~70~~ 100 transit riders during the a.m. peak and about ~~180~~ 210 during the p.m. peak. The p.m. peak hour demand for transit services would exceed the capacity of the transit system. Therefore, this would be considered a significant impact.

The total ridership (on a weekly basis) for this alternative would be ~~2.8~~ three times the ridership for the current zoning, which is consistent with the North Natomas Community Plan. This alternative would generate about ~~40~~ 9 fewer riders than the current zoning during the a.m. peak hour, but would generate 52 more riders during the p.m. peak hour. Saturday ridership would increase by ~~214~~ 222 over the current zoning.

The third paragraph on page 4-35 is revised to include the following sentence between the fifth and sixth sentences:

The project site consists of undeveloped fields, and a few buildings that include retail and office uses, a drainage canal, and several mature trees.

The third sentence in the fourth paragraph on page 4-35 is revised to read:

In December 2003, the City of West Sacramento amended the General Plan designation and zoning for the area from ~~This site is zoned and designated for General Commercial uses under the West Sacramento General Plan to Community Commercial uses.~~

Section 5.1, Land Use and Planning

The first sentence in the second full paragraph on page 5.1-9 is revised to read:

Planned adjacent uses include two ~~a~~ proposed ~~gas station and fast food establishment~~ restaurants immediately to west of the project site in a small triangle of land, and an office/ retail project is also proposed west of the project site across Gateway Boulevard.

The third and fourth sentences in the last paragraph on page 5.1-12 are revised to read:

As discussed in the Initial Study (see Appendix B) it is assumed the project will comply with the Promenade at Natomas ~~Village Center~~ Design Guidelines. The Promenade at Natomas ~~Village Center~~ Design Guidelines specify types of landscaping, architectural styles and details, and appropriate signage and lighting.

Section 5.2, Socio-economic Effects

The last sentence in the third paragraph on page 5.2-6 is revised to read:

This type of retail use would attract a larger regional market but would not compete with the shopping opportunities provided at Downtown Plaza, Arden Fair Mall, or the Roseville Galleria because the big box retailers do not locate in malls and usually carry merchandise that does not directly compete with the smaller ~~retail~~ chain retailers that are in malls.

Chapter 6.0, Population, Employment and Housing

The last sentence under Table 6-3 on page 6-7 is revised to read:

Potential businesses under the proposed land uses could include offices; ~~high-tech uses; medical, educational, and child care facilities; and support services such as~~ and regional retail.

The last sentence in the first paragraph under Population and Housing on page 6-7 is revised to read:

Therefore, the Proposed Project would not directly affect the population or housing stock within the NNCP area.

The third sentence in the second paragraph under NCCP on page 6-9 is revised to read:

Therefore, development of ~~Scenario A would result in the same jobs/housing balance and Scenario B~~ the Proposed Project would slightly decrease the jobs-housing balance for the entire NNCP area.

The third paragraph under NNCP on page 6-9 is revised to read as follows:

As shown in Table 6-2, At buildout of the portion of the NNCP area within the City, it is anticipated that the proposed land uses would generate 29,898 dwelling units and approximately 40,362 housed workers (29,898 x 1.35) and 57,342 jobs,¹ resulting in a jobs-housing balance of 70.4 percent (40,362/57,342) for the portion of the NNCP within the City. Under the Proposed Project, the additional 580 jobs proposed by the project would result in a jobs-housing balance of 70 percent (40,362/57,922) for the City portion of the NNCP. Therefore, development of the Proposed Project would increase the job-housing balance for the portion of the NNCP area within the City. This would indicate more workers would commute into the City-portion of the NNCP area, but less than under buildout of the NNCP area within the City's current General Plan designations.

Section 7.2, Transportation and Circulation

The fourth sentence in the fourth paragraph on page 7.2-9 is revised to read as follows:

~~An interchange at Arena Boulevard and I-5 is under construction and is anticipated to be operational in November 2003~~ has recently been completed and is now operational.

The first sentence in the last paragraph under Existing Traffic Volumes on page 7.2-9 is revised to read as follows:

Turning traffic volumes were counted at the study intersections during the a.m. and p.m. commuter periods (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) and on Saturday between 11:00 a.m. and 3:00 p.m. during Spring 2001.

The second sentence in the first paragraph on page 7.2-23 is revised to read as follows:

~~This interchange is currently under construction and on-line to be completed by November 2003 and~~ the trip distribution for the analysis of the Proposed Project under cumulative conditions reflects the presence of includes the I-5/Arena Boulevard interchange.

The second sentence in the fourth paragraph on page 7.2-30 is revised to read as follows:

However, because it ~~may not be~~ is not feasible to add lanes at this location, due to the available right-of-way, phasing alone may not fully mitigate the impact, the impact would be considered *significant and unavoidable*.

The first sentence in the fourth paragraph on page 7.2-32 is revised to read as follows:

~~The following discussion addresses significant impacts of the Proposed Project.~~

1 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 11.

The proposed traffic would cause the freeway level of service to deteriorate from LOS E to LOS F on the eastbound I-80 mainline east of Northgate Boulevard during the p.m. peak hour. This is a *significant impact*.

The last sentence in the fifth paragraph on page 7.2-32 is revised to read as follows:

This is considered a *significant and unavoidable impact*.

The third sentence in the first paragraph on page 7.2-33 is revised to read as follows:

The Proposed Project ~~would~~ interfere with implementation of the bikeway system proposed for North Natomas.

The following text is added to Mitigation Measure 7.2-6 on page 7.2-35.

Funding to expand bus transit service may include, but is not limited to, federal, state, and local sources, including fare box receipts.

The first sentence in the third paragraph on page 7.2-36 has been revised to read as follows:

The internal roadway configuration has changes under the Proposed Project; however, the internal roadways will be designed to City standards and must be approved by the City Traffic Engineer.

The following text is added to Mitigation Measure 7.2-8(a) under (a) Del Paso Road/National Drive (#2) discussion on page 7.2-44:

The impact after mitigation would be *less than significant*.

In addition, the following text is added under Mitigation Measure 7.2-8(c) Arena Boulevard (North Marker Boulevard)/Gateway Park Boulevard (#5) discussion on page 7.2-45:

This mitigation measure would improve the level of service from LOS D to LOS C during peak Saturday conditions. The impact after mitigation would be *less than significant*.

The following text is added to Mitigation Measure 7.2-8(h) Truxel Road/I-80 East Ramps (#13) discussion on page 7.2-46:

However, because it is not feasible to add lanes in this location, and the mitigation measures would not fully mitigate the impact, the impact of the project after mitigation would be *significant and unavoidable*.

The following text is added to Mitigation Measure 7.2-8(j) Northgate Boulevard/I-80 East Ramps (#16) discussion on page 7.2-47:

However, because it ~~may is~~ not be feasible to add lanes in this location, and the mitigation measures would not fully mitigate the impact, the impact of the project after mitigation would be *significant and unavoidable*.

The first sentence in the first paragraph on page 7.2-47 has been revised to read as follows:

This modification would not be feasible due to the lack of available right-of-way for the identified improvements and the cost of improvements is higher than what can reasonable be expected for a single project; therefore, the impact would be *significant and unavoidable*.

The second sentence in the last paragraph on page 7.2-47 has been revised to read as follows and Table 7.2-20 is included:

I-80 mainline operating conditions associated with the cumulative scenario are summarized in Tables 7.2-18, and 7.2-19, and 7.2-20.

Tables D-1 through D-6 were inadvertently omitted from Volume II, Technical Appendices. Those tables are re-printed and included after Table 7.2-20.

The following text is added to Mitigation Measure 7.2-10 on page 7.2-50.

Funding to expand bus transit service may include, but is not limited to, federal, state, and local sources, including fare box receipts.

Section 7.8, Biological Resources

The footnote reference in the second sentence under City of Sacramento General Plan on page 7.8-12 is revised include a superscript:

The following City of Sacramento General Plan⁷ policies will guide the conservation and protection of biological resources in regards to the Proposed Project:

The first paragraph on page 7.8-15 is moved to page 4-35 under the discussion for Alternative 4.

TABLE 7.2-20

**CUMULATIVE LEVELS OF SERVICE
PROPOSED PROJECT (PPB) WITH AND WITHOUT NATIONAL DRIVE EXTENSION**

Intersection	Control	AM Peak Hour			PM Peak Hour			Saturday Peak Hour			
		Without Extension		With Extension	Without Extension		With Extension	Without Extension		With Extension	
		LOS ¹	Delay?	LOS	Delay?	LOS	Delay?	LOS	Delay?	LOS	Delay?
Del Paso Rd. / Gateway Park Blvd.	Signal	D	39.1	D	39.1	C	24.6	B	19.9	B	19.9
Del Paso Rd. / National Dr.	Signal	D	45.4	D	45.5	F	97.8	C	22.9	C	23.1
Northgate Blvd. / Del Paso Rd.	4-Way Stop	F	504.5	F	504.0	F	847.9	F	70.3	F	70.4
Truxel Rd. / Arena Blvd.	Signal	F	207.4	F	207.4	F	230.8	F	38.5	D	38.5
Arena Blvd. / Gateway Park Blvd.	Signal	E	56.1	E	56.1	D	47.8	D	39.4	D	39.4
N. Market Blvd. / Sierra Point Dr.	Stop Sign	C	22.0	C	24.9	F	101.6	F	47.8	D	39.4
N. Market Blvd. / National Dr.	Signal	F	143.9	F	242.6	F	343.8	F	47.8	D	39.4
N. Market Blvd. / N. Freeway Blvd.	Stop Sign	A	2.8	A	1.0	F	166.5	C	20.5	A	2.7
N. Market Blvd. / Northgate Blvd.	Signal	F	169.7	F	167.0	F	98.7	F	96.5	B	19.9
Gateway Park Blvd. / Raley's Dr.	Stop Sign	A	0.3	A	0.3	A	0.4	A	0.4	A	0.1
Truxel Rd. / Gateway Park Blvd.	Signal	F	81.6	F	81.6	F	201.9	F	201.9	F	196.9
Lennane Dr. / N. Freeway	Stop Sign	A	4.4	A	4.9	A	4.8	A	3.8	A	3.8
Truxel Rd. / I-80 West Ramps	Signal	D	42.8	D	42.8	D	38.7	D	38.7	E	71.3
Truxel Rd. / I-80 East Ramps	Signal	C	27.7	C	27.7	F	82.1	F	82.1	C	32.5
Northgate Blvd. / I-80 West Ramps	Signal	B	17.5	B	17.5	C	32.0	C	32.0	A	8.3
Northgate Blvd. / I-80 East Ramps	Signal	F	92.2	F	92.2	F	153.3	F	153.3	B	18.0
Truxel Rd. / San Juan Rd.	Signal	F	134.3	F	134.3	E	63.4	E	58.0	E	58.0
Northgate Blvd. / San Juan Rd.	Signal	D	47.0	D	47.0	F	83.8	F	83.8	C	32.4
Gateway Park Blvd. / N. Freeway Blvd.	Signal	C	28.2	C	22.1	D	49.7	D	47.8	F	101.5
N. Freeway Blvd. / West Access	Signal	C	23.1	C	23.8	E	68.0	D	52.8	F	17.6
N. Freeway Blvd. / Middle Access	Stop Sign	A	6.6	A	4.1	F	89.1	A	9.9	B	13.0
N. Freeway Blvd. / East Access	Stop Sign	A	0.6	A	1.0	A	2.7	A	2.5	A	4.0

¹ LOS = Level of Service

² Weighted average control delay in seconds

Note: Significant impacts are shaded.

SOURCE: Dowling Associates, Inc., 2002.

**TABLE D-1
BASELINE LEVELS OF SERVICE - MITIGATED - AM PEAK HOUR**

Intersection	Control	PPA: Sacramento Auto Loop		PPA: Retail Project		Alternative A: No Project No Mitigation		Alternative B: Community Plan		Alternative C: Reduced Intensity	
		LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
Del Paso Rd. / Gateway Park Blvd.	Signal										
Del Paso Rd. / National Dr.	Signal										
Northgate Blvd. / Del Paso Rd.	Signal	C	26.6	C	26.7	C	23.2	C	26.6	C	26.6
Truxel Rd. / Arena Blvd.	Signal	C	25.8	C	26.9	C	27.5	C		C	25.3
Arena Blvd. / Gateway Park Blvd.	Signal										
N. Market Blvd. / Sierra Point Dr.	Stop Sign										
N. Market Blvd. / National Dr.	Signal	B	10.1	A	9.5	A	2.4	A	9.5	A	9.4
N. Market Blvd. / N. Freeway Blvd.	Signal	C	27.9	C		C	27.5	A	9.5		
N. Market Blvd. / Northgate Blvd.	Signal										
N. Market Blvd. / Northgate Blvd.	Signal										
Gateway Park Blvd. / Raley's Dr.	Stop Sign	C	20.0	C	20.5	B	19.7	B	19.7	C	20.2
Truxel Rd. / Gateway Park Blvd.	Signal										
Lennane Dr. / N. Freeway	Stop Sign										
Truxel Rd. / I-80 West Ramps	Signal										
Truxel Rd. / I-80 East Ramps	Signal										
Northgate Blvd. / I-80 West Ramps	Signal										
Northgate Blvd. / I-80 East Ramps	Signal										
Truxel Rd. / San Juan Rd.	Signal	C	34.4	C	33.7	E	58.7	C	33.6	C	33.5
Northgate Blvd. / San Juan Rd.	Signal					C	30.0				
Gateway Park Bl. / N. Freeway Bl.	Signal			B	15.0			B	11.3	B	13.6
N. Freeway Bl./Main Driveway	Signal			B	15.6			B		B	17.3
N. Freeway Bl./Middle Access	4-Way Stop										
N. Freeway Bl./East Access	Stop Sign										

¹ LOS = Level of Service

² Weighted average control delay in seconds

Note: Residual significant impacts are shaded.

TABLE D-2

BASELINE LEVELS OF SERVICE - MITIGATED - PM PEAK HOUR

Intersection	Control	PPA: Sacramento Auto Loop		PPA: Retail Project		Alternative A: No Project No Mitigation		Alternative B: Community Plan		Alternative C: Reduced Intensity	
		LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
Del Paso Rd. / Gateway Park Blvd.	Signal										
Del Paso Rd. / National Dr.	Signal										
Northgate Blvd. / Del Paso Rd.	Signal	C	32.8	C	33.0	F	51.8	C	32.1	C	32.9
Truxel Rd. / Arena Blvd.	Signal										
Arena Blvd. / Gateway Park Blvd.	Signal	C	29.3	C	33.7	C	31.1			C	32.7
N. Market Blvd. / Sierra Point Dr.	Signal										
N. Market Blvd. / National Dr.	Signal										
N. Market Blvd. / N. Freeway Blvd.	Signal	C	25.1	C	28.6	B	6.4	C	22.7	C	24.0
N. Market Blvd. / Northgate Blvd.	Signal	C	29.3			C	26.7	C	22.7		
Gateway Park Blvd. / Raley's Dr.	Stop Sign										
Truxel Rd. / Gateway Park Blvd.	Signal	C	32.0	C	32.6	C	27.0	C	33.0	C	31.4
Lennane Dr. / N. Freeway	Stop Sign										
Truxel Rd. / I-80 West Ramps	Signal										
Truxel Rd. / I-80 East Ramps	Signal										
Northgate Blvd. / I-80 West Ramps	Signal										
Northgate Blvd. / I-80 East Ramps	Signal										
Truxel Rd. / San Juan Rd.	Signal	C	31.8	C	32.4	D	35.8	C	31.3	C	32.5
Northgate Blvd. / San Juan Rd.	Signal					C	31.8				
Gateway Park Bl. / N. Freeway Bl.	Signal			C	24.0					C	22.7
N. Freeway Bl./Main Driveway	Signal			C	30.1					C	27.3
N. Freeway Bl./Middle Access	4-Way Stop										
N. Freeway Bl./East Access	Stop Sign										

¹ LOS = Level of Service
² Weighted average control delay in seconds
 Note: Residual significant impacts are shaded.

TABLE D-3

BASELINE LEVELS OF SERVICE - MITIGATED - SATURDAY PEAK HOUR											
Intersection	Control	PPA: Sacramento Auto Loop		PPA: Retail Project		Alternative A: No Project No Mitigation		Alternative B: Community Plan		Alternative C: Reduced Intensity	
		LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
Del Paso Rd. / Gateway Park Blvd.	Signal										
Del Paso Rd. / National Dr.	Signal										
Northgate Blvd. / Del Paso Rd.	Signal	C	25.3	C	25.1	B	10.4	C	25.5	C	25.1
Truxel Rd. / Arena Blvd.	Signal	C	28.5	C	29.7	C	25.3			C	29.6
Arena Blvd. / Gateway Park Blvd.	Signal										
N. Market Blvd. / Sierra Point Dr.	Signal										
N. Market Blvd. / National Dr.	Signal										
N. Market Blvd. / N. Freeway Blvd.	Signal	B	13.5	B	12.2	A	1.4	B	13.5	B	12.4
N. Market Blvd. / Northgate Blvd.	Signal	C	21.8			B	19.5				
Gateway Park Blvd. / Raley's Dr.	Stop Sign										
Truxel Rd. / Gateway Park Blvd.	Signal	C	29.2	C	32.2	C	22.7	C	22.0	C	32.1
Lennane Dr. / N. Freeway	Stop Sign										
Truxel Rd. / I-80 West Ramps	Signal										
Truxel Rd. / I-80 East Ramps	Signal										
Northgate Blvd. / I-80 West Ramps	Signal										
Northgate Blvd. / I-80 East Ramps	Signal										
Truxel Rd. / San Juan Rd.	Signal	C	27.5	C	27.7	C	31.6	C	27.9	C	27.7
Northgate Blvd. / San Juan Rd.	Signal					C	29.3				
Gateway Park Bl. / N. Freeway Bl.	Signal			C	28.7					C	32.0
N. Freeway Bl./Main Driveway	Signal			C	22.3					C	21.1
N. Freeway Bl./Middle Access	4-Way Stop										
N. Freeway Bl./East Access	Stop Sign										

¹ LOS = Level of Service

² Weighted average control delay in seconds

Note: Residual significant impacts are shaded.

TABLE D-4

CUMULATIVE LEVELS OF SERVICE - MITIGATED - AM PEAK HOUR

Intersection	Control	PPA: Sacramento Auto Loop		PPA: Retail Project		Alternative A: No Project No Mitigation		Alternative B: Community Plan		Alternative C: Reduced Intensity	
		LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
Del Paso Rd. / Gateway Park Blvd.	Signal	C	29.7	C	29.5	D	42.4	C	29.5	C	29.2
Del Paso Rd. / National Dr.	Signal	C	29.3	C	34.0	F	497.5	C	33.8	C	33.8
Northgate Blvd. / Del Paso Rd.	Signal										
Truxel Rd. / Arena Blvd.	Signal			C	30.8	E	57.7			C	30.7
Arena Blvd. / Gateway Park Blvd.	Signal										
N. Market Blvd. / Sierra Point Dr.	Stop Sign										
N. Market Blvd. / National Dr.	Signal	D	36.2	D	36.3	F	127.8	D	36.3	D	36.3
N. Market Blvd. / N. Freeway Blvd.	Signal	B	10.3	A	9.9	A	0.7	A	9.3	A	8.2
N. Market Blvd. / Northgate Blvd.	Signal	F	105.7	F	102.4	F	138.7	F	97.2	F	88.4
Gateway Park Blvd. / Raley's Dr.	Stop Sign										
Truxel Rd. / Gateway Park Blvd.	Signal	D	48.0	D	38.7	C	31.3	D	39.2	C	34.3
Lennane Dr. / N. Freeway	Stop Sign										
Truxel Rd. / I-80 West Ramps	Signal	E	58.1	D	42.8	C	26.4	D	48.7	D	37.4
Truxel Rd. / I-80 East Ramps	Signal	C	23.7	C	23.5	C	21.9	C	23.5	C	22.9
Northgate Blvd. / I-80 West Ramps	Signal										
Northgate Blvd. / I-80 East Ramps	Signal			E	68.0	F	90.9	E	69.0	E	74.3
Truxel Rd. / San Juan Rd.	Signal	D	39.6	D	36.3	F	115.9	D	36.0	D	35.8
Northgate Blvd. / San Juan Rd.	Signal	C	34.1	C	24.5	D	47.0	C	20.6	C	21.4
Gateway Park Bl. / N. Freeway Bl.	Signal	C	24.5	C	22.3	B	17.1	C	15.6	C	24.2
N. Freeway Bl./Main Driveway	Signal			B	19.6						
N. Freeway Bl./Middle Access	4-Way Stop	A	9.2	B	14.3						
N. Freeway Bl./East Access	4-Way/Signal	B	10.1								

¹ LOS = Level of Service
² Weighted average control delay in seconds
 Note: Residual significant impacts are shaded.

**TABLE D-5
CUMULATIVE LEVELS OF SERVICE - MITIGATED - PM PEAK HOUR**

Intersection	Control	PPA: Sacramento Auto Loop		PPA: Retail Project		Alternative A: No Project No Mitigation		Alternative B: Community Plan		Alternative C: Reduced Intensity	
		LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
Del Paso Rd. / Gateway Park Blvd.	Signal	C	33.4	C	34.0	E	79.9	C	31.9	C	33.9
Del Paso Rd. / National Dr.	Signal	C	33.5	C	34.2	F	833.1	C	33.7	C	34.2
Northgate Blvd. / Del Paso Rd.	Signal										
Truxel Rd. / Arena Blvd.	Signal			C	32.7	D	45.9			C	31.4
Arena Blvd. / Gateway Park Blvd.	Signal										
N. Market Blvd. / Sierra Point Dr.	Stop Sign										
N. Market Blvd. / National Dr.	Signal	C	34.8	D	36.3	F	347.9	D	35.8	D	36.0
N. Market Blvd. / N. Freeway Blvd.	Signal	B	19.1	C	22.7	B	13.9	B	13.7	B	16.5
N. Market Blvd. / Northgate Blvd.	Signal	E	60.4	E	66.2	E	78.6	D	54.2	E	59.0
Gateway Park Blvd. / Raley's Dr.	Stop Sign										
Truxel Rd. / Gateway Park Blvd.	Signal	F	157.7	F	160.2	F	108.3	F	157.4	F	149.2
Lennane Dr. / N. Freeway	Stop Sign										
Truxel Rd. / I-80 West Ramps	Signal	D	41.7	D	38.7	B	17.3	D	37.8	C	34.5
Truxel Rd. / I-80 East Ramps	Signal	C	25.4	C	26.6	D	50.5	C	22.7	C	26.0
Northgate Blvd. / I-80 West Ramps	Signal										
Northgate Blvd. / I-80 East Ramps	Signal			E	67.1	F	117.6	E	65.1	E	64.8
Truxel Rd. / San Juan Rd.	Signal	D	40.5	D	41.3	D	52.4	D	39.3	D	41.0
Northgate Blvd. / San Juan Rd.	Signal	D	49.8	C	32.7	F	81.5	C	30.2	C	31.5
Gateway Park Bl. / N. Freeway Bl.	Signal	C	34.5	C	31.6	C	27.4	C	27.8	C	29.6
N. Freeway Bl./Main Driveway	Signal										
N. Freeway Bl./Middle Access	4-Way Stop	C	19.1	C	20.2						
N. Freeway Bl./East Access	4-Way/Signal	C	17.4	C	20.2						

¹ LOS = Level of Service

² Weighted average control delay in seconds

Note: Residual significant impacts are shaded.

TABLE D-6

CUMULATIVE LEVELS OF SERVICE - MITIGATED - SATURDAY PEAK HOUR

Intersection	Control	PPA: Sacramento Auto Loop		PPA: Retail Project		Alternative A: No Project No Mitigation		Alternative B: Community Plan		Alternative C: Reduced Intensity	
		LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
Del Paso Rd. / Gateway Park Blvd.	Signal	C	21.5	C	22.1	C	20.5	B	20.0	C	22.1
Del Paso Rd. / National Dr.	Signal	C	25.0	C	25.3	F	55.7	C	25.0	C	25.3
Northgate Blvd. / Del Paso Rd.	Signal										
Truxel Rd. / Arena Blvd.	Signal			C	34.8	C	30.6			C	34.5
Arena Blvd. / Gateway Park Blvd.	Signal										
N. Market Blvd. / Sierra Point Dr.	Stop Sign										
N. Market Blvd. / National Dr.	Signal	C	23.2	C	24.9	B	15.8	C	21.3	C	24.9
N. Market Blvd. / N. Freeway Blvd.	Signal	B	11.5	B	12.1	A	0.1	A	5.0	B	11.9
N. Market Blvd. / Northgate Blvd.	Signal	B	19.4	C	20.9	B	14.4	B	18.3	C	20.8
Gateway Park Blvd. / Raley's Dr.	Stop Sign	F	117.6	F	138.1	F	94.1	E	71.4	F	137.1
Truxel Rd. / Gateway Park Blvd.	Signal										
Lennane Dr. / N. Freeway	Stop Sign	B	66.4	B	71.3	C	28.0	D	35.4	F	70.5
Truxel Rd. / I-80 West Ramps	Signal	B	16.5	B	18.4	B	12.1	B	13.4	B	18.3
Truxel Rd. / I-80 East Ramps	Signal										
Northgate Blvd. / I-80 West Ramps	Signal			B	18.3	B	18.3	B	19.3	B	18.3
Northgate Blvd. / I-80 East Ramps	Signal			C	31.2	D	36.5	C	30.1	C	31.2
Truxel Rd. / San Juan Rd.	Signal	C	30.4	C	31.2	C	31.9	C	28.5	C	33.5
Northgate Blvd. / San Juan Rd.	Signal	C	30.7	C	33.6	C	28.5	C	26.0	C	33.5
Gateway Park Bl. / N. Freeway Bl.	Signal	C	33.3	C	26.5	C	13.0	B	11.0	C	25.6
N. Freeway Bl./Main Driveway	Signal										
N. Freeway Bl./Middle Access	4-Way Stop	B	13.3	B	13.0						
N. Freeway Bl./East Access	4-Way/Signal	B	12.7								

¹ LOS = Level of Service

² Weighted average control delay in seconds

Note: Residual significant impacts are shaded.

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
7.2 Transportation and Circulation			
7.2-1 Intersections.			
<p>The prior Retail Project development scenario (PPB) would provide no automall use and would provide approximately 740,000 sf of regional retail uses and 772,500 sf of office/retail uses. Intersection operating conditions associated with the baseline plus Proposed Project scenario are summarized in Table 7.2-11. Although the revised Proposed Project is smaller, the EIR analysis assumes the larger project would be developed. This development scenario would cause <i>significant impacts</i> at the following intersections:</p> <ul style="list-style-type: none"> Northgate Boulevard/Del Paso Road – traffic associated with the Proposed Project would degrade the level of service at the intersection of Northgate Boulevard and Del Paso Road from LOS C to LOS D during the a.m. peak hour. The intersection would operate at LOS F during the p.m. peak hour, with an average delay increase of 15 seconds due to the project. This is considered a <i>significant impact</i>. Arena Boulevard (North Market Boulevard)/Gateway Park Boulevard - traffic associated with the Proposed Project would degrade the level of service at the intersection of Arena Boulevard from LOS C to LOS D during the p.m. peak hour. This is considered a <i>significant impact</i>. North Market Boulevard/North Freeway Boulevard - traffic associated with the Proposed Project would degrade the level of service at the intersection of N. Market Boulevard from North Freeway Boulevard from LOS B to LOS F during the p.m. peak hour. This is considered a <i>significant impact</i>. Truxel Road/Gateway Park Boulevard - traffic associated with the Proposed Project would degrade the level of service at the intersection from LOS B to LOS F during the a.m. peak hour, from LOS C to LOS D during the p.m. peak hour, and from LOS C to LOS D during the Saturday peak hour. This is considered a <i>significant impact</i>. 	S	<p>(a) Northgate Boulevard/Del Paso Road (#3)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C during peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>A traffic signal shall be installed with protected left turn signal phasing for eastbound and westbound approaches and split signal phasing for the northbound and southbound approaches. An overlap traffic signal phasing shall be provided to allow northbound Northgate Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound Del Paso Road left turning movement, and prohibit U-turns for the westbound left turning movement.</i></p>	LS
	S	<p>(b) Arena Boulevard (North Market Boulevard)/ Gateway Park Boulevard (#5)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C during peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>Overlap traffic signal phasing shall be provided to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement.</i></p>	LS

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<ul style="list-style-type: none"> ▪ Truxel Road/San Juan Road – traffic associated with the Proposed Project would degrade the level of service at the intersection from LOS E to LOS F during the a.m. peak hour. During the p.m. peak hour, the intersection would operate at LOS D. This is considered a <i>significant impact</i>. ▪ North Market Boulevard/Northgate Boulevard— traffic at this intersection would not result in a significant impact. The impact would be considered <i>less than significant</i>. ▪ Gateway Park Boulevard/North Freeway Boulevard – this new intersection would operate at LOS E during the Saturday peak hour if constructed as shown in Figure 7.2-5. This is considered a <i>significant impact</i>. ▪ North Freeway Boulevard/West Project Access – This intersection will be designed to operate in accordance with City standards. 	<p>S</p>	<p>(c) North Market Boulevard/North Freeway Boulevard (#8)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>A traffic signal with protected left turn signal phasing shall be installed for the westbound North Market Boulevard approach. Overlap traffic signal phasing shall be provided to allow northbound North Freeway Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement.</i></p>	<p>LS</p>
	<p>S</p>	<p>(d) Truxel Road/Gateway Park Boulevard (#11)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>The four-lane approach to the intersection from the Natomas Marketplace shall be converted to provide a left-turn lane, a combination left-through lane, and two right turn lanes. An overlap traffic signal phasing shall be provided to allow right turning traffic to proceed on a green arrow simultaneously with the northbound Truxel Road left turning movement, and prohibit U-turns for the northbound left turn movement; and</i></p>	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	<p>SU</p>	<p><i>The five-lane approach to the intersection from Gateway Park Boulevard shall be converted to provide three left turn lanes, a through lane, and a right turn lane; and</i></p> <p><i>An overlap traffic signal phasing shall be provided to allow northbound Truxel Road right turning traffic to proceed on a green arrow simultaneously with the southbound Gateway Park Boulevard left turning movement, and prohibit U-turns for the southbound left turn movement; and</i></p> <p><i>Split phasing for the northbound Natomas Marketplace approach and the southbound Gateway Park Boulevard approach shall be provided.</i></p> <p>(e) Truxel Road/San Juan Road (#17)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C during peak conditions. However, because it <u>may not be</u> is not feasible to add lanes at this location, <u>due to available right-of-way, phasing alone may not fully mitigate the impact, the impact would be considered significant and unavoidable.</u></p> <p><i>A right turn lane shall be added to the westbound San Juan Road approach to provide two left turn lanes, two through lanes and two right turn lanes and provide overlap traffic signal phasing to allow westbound San Juan Road right turning traffic to proceed on a green arrow simultaneously with the southbound Truxel Road left turning movement, and prohibit U-turns for the southbound left turning movement. However, it may not be feasible to add lanes in this location; and</i></p> <p><i>An overlap traffic signal phasing shall be provided to allow northbound Truxel Road right turning traffic to proceed on a green arrow simultaneously with the westbound San Juan Road left turning movement, and prohibit U-turns for the westbound left turning movement.</i></p>	<p>SU</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	S	<p>(f) Gateway Park Boulevard/North Freeway Boulevard (#19)</p> <p>This mitigation measure would improve the level of service from LOS E or worse to LOS C during Saturday peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>A left turn lane shall be added to the southbound Gateway Park Boulevard approach to provide two left turn lanes and two through lanes; and</i></p> <p><i>An overlap traffic signal phasing shall be provided to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Freeway Boulevard left turning movement, and prohibit U-turns for the westbound left turn movement.</i></p>	LS
<p>7.2-2 Freeways.</p> <p>The following discussion of freeway operations addresses only the impacts identified as significant according to the significance criteria identified earlier in this section. Other portions of the freeway would fail to satisfy Caltrans standards with or without the project and would not be identified as significant impacts.</p> <p>Development of the Proposed Project would increase traffic volumes on the freeway system. I-80 mainline operating conditions associated with the baseline plus project scenario are included in Tables 7.2-12 and 7.2-13.</p> <p>Westbound I-80 would operate at LOS F west of Northgate Boulevard during the a.m. peak hour with or without the Proposed Project and for all the project alternatives. Likewise, the I-80 westbound Northgate Boulevard off-ramps would operate at LOS F during the a.m. peak hour. None of these freeway operational problems would be significant impacts of the project because the condition would exist without the Proposed Project.</p>	S	<p>7.2-2 Freeways.</p> <p>None available.</p>	SU

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Level of Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>In addition, during the p.m. peak hour, both the northbound and southbound Northgate Boulevard ramps onto eastbound I-80 would operate at LOS F, but the downstream freeway would also operate at LOS F, so there would be no significant impacts at the ramps. A significant impact at a freeway ramp would occur if project traffic would cause the ramp's merge/diverge level of service to be worse than the freeway's level of service.</p> <p>Freeway off-ramp queues would be contained without extending into the ramp's deceleration area or onto the freeway for the Proposed Project and all alternatives. Expected queues are shown in the traffic study supplemental document that contains the level of service calculations.</p> <p>The following discussion addresses significant impacts of the Proposed Project: The proposed traffic would cause the freeway level of service to deteriorate from LOS E to LOS F on the eastbound I-80 mainline east of Northgate Boulevard during the p.m. peak hour. This is a <i>significant impact</i>.</p> <p>The Proposed Project development scenario would cause significant impacts at freeway locations. The project would cause the southbound Truxel Road merge onto westbound I-80 to operate at LOS E during the p.m. peak hour when the freeway would operate at LOS C. This is considered a <i>significant and unavoidable impact</i>.</p>	<p>S</p>	<p>7.2-3 Bikeways. A Class I bike trail or Class II bike lane shall be provided through the Proposed Project site in accordance with the Sacramento Bikeway Master Plan.</p>	<p>LS</p>
<p>Development of the project would result in the addition of employees, visitors, and shopping patrons to the project site, some who would travel by bicycle. A Class I bike trail is shown on the Sacramento Bikeway Master Plan that would pass through the Proposed Project site. The Proposed Project would interfere with implementation of the bikeway system proposed for North Natomas. This would be a <i>significant impact</i>.</p>	<p>LS</p>	<p>7.2-4 Pedestrian Circulation. None required.</p>	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>The project is not anticipated to result in unsafe conditions for pedestrians, including unsafe bicycle/pedestrian or pedestrian/motor vehicle conflicts. Therefore, with regard to pedestrian circulation, there would be a <i>less-than-significant impact</i>.</p>			
<p>7.2-5 Parking. Development of the Proposed Project would increase the demand for parking. The parking demand and proposed parking supply for the Proposed Project are shown in Table 7.2-14. The Proposed Project would provide enough parking on site in accordance with City Code to accommodate the typical parking demand. Since the Proposed Project must comply with City Code, <i>no impact</i> is identified.</p>	NI	<p>7.2-5 Parking. None required.</p>	NA
<p>7.2-6 Transit Ridership. Regional Transit Routes 13 and 14 currently serve the project site with a total of four buses during the a.m. peak hour and two during the p.m. peak hour. The buses on these routes have a capacity of 40 passengers per vehicle for a total capacity of 160 passengers during the a.m. peak hour and 80 passengers during the p.m. peak hour. The peak direction of patronage along these routes during the weekday commute is toward the Arden/Del Paso Light Rail Station (toward downtown Sacramento) during the a.m. peak hour and away from downtown during the p.m. peak hour. The demand for transit service to the project site would be in the reverse direction of the peak commuter demand. The prior retail project was projected to generate 83 transit riders during the a.m. peak, and 195 during the p.m. peak hour. The p.m. peak hour demand for transit services would exceed the capacity of the transit system. Therefore, this would be a <i>significant impact</i>. The total ridership (on a weekly basis) for the Proposed Project would be approximately three times the ridership for the current zoning. The Proposed Project would generate about 27 fewer riders than the current zoning during the a.m. peak hour, but would increase ridership during the p.m. peak hour by 36 riders. Saturday ridership would increase by 225 transit riders.</p>	S	<p>7.2-6 Transit Ridership. <i>Funding shall be provided to RT to expand bus transit service sufficient to accommodate the traffic demand at the site. Funding to expand bus transit services may include, but is not limited to, federal, state, and local sources, including fare box receipts.</i></p>	LS

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.2-7 Traffic Circulation and Safety.</p> <p>Several roadway design aspects were evaluated with regard to traffic circulation and safety. The number of lanes, access control, and centerline radius required on the primary roadways serving the site were evaluated according to the City of Sacramento Street Design Guidelines (Revised December 2001) (see Appendix D). A summary of the standard number of lanes for roadways affected by the Proposed Project is provided in Table 7.2-15.</p> <p>Based on the daily traffic volumes, the Sacramento Street Design Guidelines identify a need for six through lanes on Gateway Park Boulevard from Truxel Road to North Freeway Boulevard and on North Freeway Boulevard from Gateway Park Boulevard to the Main Project driveway. The site plans show four lane roadways in these sections.</p> <p>No driveway access would be allowed along Truxel Road (an eight-lane roadway), nor would driveway access be allowed along Gateway Park Boulevard between Truxel Road and North Freeway Boulevard, a distance of approximately 850 feet, due to the requirement for 500-foot driveway spacing on six-lane roadways. These access restrictions are necessary to prevent potentially hazardous weaving movements across multiple lanes of heavily traveled streets.</p> <p>The centerline radius on Gateway Park Boulevard between Truxel Road and North Freeway Boulevard is approximately 1000 feet. The standard radius for this section of six-lane roadway is 1500 feet (based on the Sacramento Street Design Guidelines).</p> <p>The internal roadway configuration has changed under the Proposed Project; however, the internal roadways will be designed to City standards and must be approved by the City Traffic Engineer. This would ensure impacts associated with internal roadways and driveway placement would be less than significant.</p> <p>The design elements discussed above could result in substandard levels of safety and would constitute a <i>significant impact</i>.</p>	<p>S</p>	<p>7.2-7 Traffic Circulation and Safety.</p> <p>(a) Required number of lanes</p> <p>The mitigation measures described below regarding the number of lanes to <i>less-than-significant</i> levels.</p> <p><i>Six through lanes shall be provided on Gateway Park Boulevard from Truxel Road to North Freeway Boulevard or Main Project driveway. Driveways shall be prohibited on Truxel Road and Gateway Park Boulevard from Truxel Road to North Freeway Boulevard.</i></p> <p>(b) Centerline radii</p> <p>A roadway design that satisfies the Caltrans standard for comfortable speed on horizontal curves and is acceptable to the City of Sacramento Public Works Department would mitigate this impact to <i>less than significant</i> levels.</p> <p><i>A design that satisfies Caltrans requirements for horizontal curves described in the Highway Design Manual (Figure 203.2) for the six-lane section of Gateway Park Boulevard shall be provided. A combination of centerline radius modifications (standard is 1,500 feet), superelevation (0.06 maximum is standard per Caltrans Design Manual Table 202.2), and/or speed limit restrictions (55 mph is City standard for six-lane streets in North Natomas serving up to 36,000 vehicles daily). A roadway with 1,000-foot centerline radius and 0.08 superelevation would provide a 55 mph design speed. A 0.04 superelevation could be provided if the design speed were reduced to 50 mph and a 1,000-foot radius were used.</i></p>	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Level of Significance After Mitigation
<p>7.2-8 Intersections. (Cumulative) The Proposed Project would increase traffic volumes at study area intersections. Intersection operating conditions associated with the cumulative scenario are summarized in Table 7.2-16. <i>Significant impacts</i> would occur at the following intersections:</p> <ul style="list-style-type: none"> ▪ Del Paso Road/National Drive – the intersection would operate at LOS E during the p.m. peak hour without the Proposed Project, and the Proposed Project would increase the average delay by 15 seconds. This is considered a <i>significant impact</i>. ▪ Northgate Boulevard/Del Paso Road – the intersection would operate at LOS F during the a.m., p.m., and Saturday peak hour under existing conditions. Without the Proposed Project the Del Paso Road/National Drive intersection would operate at LOS E during the p.m. peak hour. Under the project the average delay would increase by 15 seconds. This is considered a <i>significant impact</i>. <p>Increase the average delay at the intersection by 18 seconds during the a.m. and p.m. peak hours, by 8 seconds during Saturday peak hour. This is considered a <i>significant impact</i>.</p>	<p>S</p>	<p>7.2-8 Intersections. (Cumulative) (a) Del Paso Road/National Drive (#2) The impact after mitigation would be <i>less than significant</i>. Three through lanes shall be provided in each direction on Del Paso Road in conformance with the North Natomas Community Plan¹, and Two lanes shall be added to the northbound National Drive approach to provide two left turn lanes, two through lanes, and one right turn lane; and One lane shall be added to the southbound National Drive approach to provide two left turn lanes, one through lane, and one combination through-right turn lane.</p>

¹ The entire section of Del Paso Road will need to be widened to six lanes within the study area (from Gateway Park Boulevard to Northgate Boulevard) to provide acceptable traffic operations for cumulative conditions.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<ul style="list-style-type: none"> ■ North Market Boulevard/National Drive - the intersection would operate at LOS F during the a.m. peak hour without the Proposed Project, and the project would increase the average delay by 16 seconds. This is considered a <i>significant impact</i>. ■ North Market Boulevard/North Freeway Boulevard - traffic would degrade the level of service at the intersection from LOS B to LOS D during the p.m. peak hour. This is considered a <i>significant impact</i>. ■ North Market Boulevard/Northgate Boulevard - the intersection would operate at LOS F during the a.m. peak hour without the project, and with the project would increase the average delay by 34 seconds. The intersection would operate at LOS E during the p.m. peak hour without the project, and with the project would increase the average delay by 15 seconds. This is considered a <i>significant impact</i>. ■ Truxel Road/Gateway Park Boulevard - traffic from the project would degrade the level of service at the intersection from LOS C to LOS F during the a.m. peak hour. The intersection would operate at LOS F during the p.m. and Saturday peak hour without the project; the project would essentially double the average delay at the intersection during these time periods. This is considered a <i>significant impact</i>. ■ Truxel Road/I-80 West Ramps - traffic from the project would degrade the level of service at the intersection from LOS C to LOS E during the Saturday peak hour. This is considered a <i>significant impact</i>. ■ Truxel Road/I-80 East Ramps - traffic from the project would degrade the level of service at the intersection from LOS D to LOS E during the p.m. peak hour. This is considered a <i>significant impact</i>. 	<p>S</p>	<p>(b) Del Paso Road/Northgate Boulevard (#3)</p> <p>This mitigation measure would improve the level of service from LOS F to LOS C during peak conditions. The impact after mitigation would be less than significant.</p> <p><i>A traffic signal shall be installed with protected left turn signal phasing for eastbound and westbound approaches and split signal phasing for the northbound and southbound approaches; and</i></p> <p><i>For the eastbound Del Paso Road approach, the following shall be provided: one left turn lane, three through lanes, and one right turn lane with overlap signal phasing to allow eastbound Del Paso Road right turning traffic to proceed on a green arrow simultaneously with the northbound Northgate Boulevard left turning movement, and prohibit U-turns for the northbound left turning movement; and</i></p> <p><i>For the westbound Del Paso Road approach, the following shall be provided: two left turn lanes, two through lanes, and a combination through-right turn lane; and</i></p> <p><i>For the northbound Northgate Boulevard approach, the following shall be provided: two left turn lanes, a combination left-through lane, and two right turn lanes with overlap traffic signal phasing to allow northbound Northgate Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound Del Paso Road left turning movement, and prohibit U-turns for the westbound left turning movement.</i></p>	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<ul style="list-style-type: none"> ▪ Truxel Road/San Juan Road – the intersection would operate at LOS F during the a.m. peak hour without the project, and with the project would increase the average delay by 38 seconds. During the p.m. and Saturday peak hours, the intersection would operate at LOS D, and with the project would increase the average delay by 10 seconds and 12 seconds, respectively. This is considered a <i>significant impact</i>. ▪ Gateway Park Boulevard/North Freeway Boulevard – traffic from the project would degrade the level of service at the intersection from LOS C to LOS D during the p.m. and Saturday peak hours. This is considered a <i>significant impact</i>. ▪ Arena Boulevard/Gateway Park Boulevard (additional significant <i>impact</i> because the Proposed Project would degrade the level of service at the intersection from LOS C to LOS D during the Saturday peak hour) ▪ Northgate Boulevard/I-80 East Ramps (additional <i>significant impact</i> because the intersection would operate at LOS F during the p.m. peak hour without the project, and with the project would increase the average delay by 16 seconds) ▪ Northgate Boulevard/San Juan Road (<i>less-than-significant impact</i>) 	<p>S</p>	<p>(c) Arena Boulevard (North Market Boulevard)/Gateway Park Boulevard (#5)</p> <p>This mitigation measure would improve the level of service from LOS D to LOS C during peak Saturday conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p>An overlap traffic signal phasing shall be provided to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement. This mitigation measure would improve the level of service from LOS D to LOS C during peak Saturday conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p>(d) North Market Boulevard/National Drive (#7)</p> <p>This mitigation measure would improve the level of service from LOS F to LOS D during weekday peak conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p>Two lanes shall be added to the northbound National Drive approach to provide one left turn lane, one through lane, and one right turn lane with overlap phasing to allow northbound National Drive right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement, and</p>	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	S	<p>Two lanes shall be added to the southbound National Drive approach to provide one left turn lane, one through lane, and one right turn lane with overlap phasing to allow southbound National Drive right turning traffic to proceed on a green arrow simultaneously with the eastbound North Market Boulevard left turning movement, and prohibit U-turns for the eastbound left turning movement; and</p> <p>Two lanes shall be added to the eastbound North Market Boulevard approach to provide two left turn lanes, one through lane, and one combination through-right turn lane; and</p> <p>One lane shall be added to the westbound North Market Boulevard approach to provide one left turn lane, one through lane, and one combination through-right turn lane.</p>	LS
	S	<p>(c) North Market Boulevard North Freeway Boulevard (#8)</p> <p>This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be less than significant.</p> <p>A traffic signal shall be installed with protected left turn signal phasing for the westbound North Market Boulevard approach, provide overlap traffic signal phasing to allow northbound North Freeway Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Market Boulevard left turning movement, and prohibit U-turns for the westbound left turning movement.</p>	LS

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	SU	<p>(f) North Market Boulevard/Northgate Boulevard (#9)</p> <p>This mitigation measure would not improve the level of service in comparison to the level of service without the project. The mitigation measure would reduce delay at the intersection during congested periods below the delay that would occur without the project. However, because it may not be feasible to add lanes in this location, and the mitigation measure would not fully mitigate the impact, the impact of the project after mitigation would be <i>significant and unavoidable</i>.</p> <p>One lane shall be added to the southbound Northgate Boulevard approach to provide one left turn, two through lanes, and one combination through-right turn lane. However, it may not be feasible to add lanes at this location and</p> <p>The right-turn channelizing island shall be removed and two lanes added to the eastbound North Market Boulevard approach to provide a left turn lane, a combination through-right turn lane, and two right turn lanes, and</p> <p>The two westbound North Market Boulevard approach lanes shall be provided and provide one left turn lane and one combination through-right turn lane, and</p> <p>A protected left-turn phasing for all intersection approaches shall be provided, and</p> <p>An overlap traffic signal phasing shall be provided to allow eastbound North Market Boulevard right turning traffic to proceed on a green arrow simultaneously with the northbound Northgate Boulevard left turning movement, and prohibit U-turns for the northbound left turning movement.</p>	SU

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	SU	<p>(g) Truxel Road/Gateway Park Boulevard (#11)</p> <p>Delays at this intersection would be higher after mitigation than with no project and no mitigation. Therefore, this impact would remain <i>significant and unavoidable</i>.</p> <p><i>Implement Mitigation Measure 7.2-1(e).</i></p>	SU
	S	<p>(h) Truxel Road/I-80 West Ramps (#13)</p> <p>No feasible mitigation measures were identified; therefore, this impact would remain <i>significant and unavoidable</i>.</p> <p>(i) Truxel Road/I-80 East Ramps (#14)</p> <p>This mitigation measure would improve the level of service from LOS E or worse to LOS C during p.m. peak hour conditions. The impact after mitigation would be <i>less than significant</i>.</p> <p><i>The existing lanes for southbound Truxel Road shall be modified to provide two through lanes and two right turn lanes. This modification would require the approval of Caltrans.</i></p>	LS
	SU	<p>(i) Northgate Boulevard/I-80 East Ramps (#16)</p> <p>No feasible mitigation measures were identified for this intersection. If the Northgate Boulevard bridge structure across I-80 were widened to add one lane to the southbound Northgate Boulevard approach, resulting in one through lane, one combination through-right turn lane, and one right turn lane, the level of service would be improved from LOS F to LOS E during p.m. peak hour conditions – better than the LOS F conditions that would occur without the project. This modification would not be feasible due to the lack of available right-of-way for the identified improvements and the cost of improvements is higher than what can reasonable be expected for a single project; therefore, the impact would be <i>significant and unavoidable</i>.</p>	SU

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	S	(k) Truxel Road/San Juan Road (#17) This mitigation measure would improve the level of service from LOS F to LOS D during the a.m. peak hour— better than the LOS F that would result without the project. The mitigation measure would improve the level of service from LOS E to LOS D during the p.m. peak hour – resulting in lower delay than would result without the project. During the Saturday peak hour, the mitigation measure would improve the level of service from LOS D or worse to LOS C. Therefore, the impact after mitigation would be <i>less-than-significant</i> . <i>Implement Mitigation Measure 7.2-1 (f); and</i> <i>An overlap traffic signal phasing shall be provided to allow eastbound San Juan Road right turning traffic to proceed on a green arrow simultaneously with the northbound Truxel Road left turning movement, and prohibit U-turns for the northbound left turning movement.</i>	LS
	S	(l) Gateway Park Boulevard / North Freeway Boulevard (#19) This mitigation measure would improve the level of service from LOS D or worse to LOS C or better during peak conditions. The impact after mitigation would be <i>less than significant</i> . <i>Two lanes shall be added to the northbound Gateway Park Boulevard approach to provide two left turn lanes, two through lanes, and two right turn lanes with overlap phasing to allow northbound Gateway Park Boulevard right turning traffic to proceed on a green arrow simultaneously with the westbound North Freeway Boulevard left turning movement, and prohibit U-turns for the westbound left turn movement; and</i> <i>Two lanes to the southbound Gateway Park Boulevard approach shall be added to provide two left turn lanes, two through lanes, and one right turn lane; and</i>	LS

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.2-9 Freeways. (Cumulative)</p> <p>The Proposed Project development scenario would increase traffic volumes on the freeway system. I-80 mainline operating conditions associated with the cumulative scenario are summarized in Tables 7.2-18, 7.2-19, and 7.2-20, and cause the following <i>significant impacts</i> on I-80:</p> <ul style="list-style-type: none"> ▪ Traffic would cause the freeway level of service to deteriorate from LOS E to LOS F on the I-80 mainline east of Northgate Boulevard during the Saturday peak hour. ▪ Traffic would cause the westbound I-80 diverge at the Northgate Boulevard interchange to operate at LOS F during the p.m. peak hour when the freeway would operate at LOS E (without the project, the diverge would operate at LOS D and the freeway would operate at LOS E). 	<p>S</p>	<p>7.2-9 Freeways. (Cumulative)</p> <p>For eastbound I-80 east of Northgate Boulevard, it might be possible to mitigate impacts associated with the Proposed Project for this section of I-80; however, there are several constraints that make mitigation infeasible. A discussion of the potential mitigation and constraints that make mitigation infeasible are provided under the discussion of baseline conditions. In summary, adding lanes to I-80 would require widening the bridge across the Natomas East Main Drainage Canal and the Union Pacific Railroad tracks. Widening the freeway east of the bridge may require additional right-of-way or expensive construction methods to avoid right-of-way acquisition. The potential mitigation measure is considered infeasible; therefore, this impact would remain <i>significant and unavoidable</i>. For westbound I-80 at the Northgate Boulevard Off-Ramp, it might be possible to mitigate impacts associated with the project for the off-ramp; however, similar constraints to those listed above make mitigation infeasible. The potential mitigation would require providing a two lane exit ramp by adding an auxiliary lane 1300 feet in advance of the interchange ramp as required by Caltrans design standards. This mitigation measure would improve p.m. peak hour ramp operations to LOS D or better, but would also require widening the bridge across the Natomas East Main Drainage Canal and the Union Pacific Railroad tracks. Widening the freeway east of the bridge may require additional right-of-way or expensive construction methods to avoid right-of-way acquisition. The potential mitigation measure is considered infeasible; therefore, this impact would remain <i>significant and unavoidable</i>.</p>	<p>SU</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.2-10 Transit Ridership. (Cumulative)</p> <p>A light rail transit (LRT) extension, the Downtown-Natomas-Airport (DNA), is planned along Truxel Road with construction expected to commence in 2010. The North Natomas Composite Plan Transportation Evaluation (Kirtleson & Associates, Inc. 1992) indicates that LRT would capture four percent of the trips that terminate within ¼ mile of a transit station, and three percent of the trips outside that limit. That assumption would indicate that LRT would serve about 540 weekday trips for current zoning – about 70 percent of the total weekday transit trips.</p> <p>The Proposed Project development scenario would serve about 780 new weekday riders. The planned LRT system will be designed with a capacity to serve development according to the current zoning. During the peak hour of operation, the project would generate about 25 more LRT riders than current zoning – the equivalent of about one-half additional LRT car during the p.m. peak hour. This would be a <i>significant impact</i>.</p>	S	<p>7.2-10 Transit Ridership. (Cumulative)</p> <p>Funding shall be provided to expand LRT operations to accommodate the additional project demand for transit services. Funding to expand bus transit service may include, but is not limited to, federal, state, and local sources, including fare box receipts.</p>	LS
7.3 Air Quality			
<p>7.3-1 Construction-related PM₁₀ emissions. (Project-specific)</p> <p>Under the Proposed Project, approximately 6.19 µg/m³ of PM₁₀ would be generated on any given day. This assumes that a maximum of 15 acres per day are graded. The estimated PM₁₀ emissions would not exceed SMAQMD's threshold of 30 µg/m³, therefore, this impact would be <i>less than significant</i>.</p>	LS	<p>7.3-1 Construction-related PM₁₀ emissions. (Project-specific)</p> <p>None required.</p>	NA
<p>7.3-2 Construction-related ozone precursor emissions. (Project-specific)</p> <p>As shown in Table 7.3-5, under the Proposed Project, 45.48 lbs/day of ROG, 565.58 lbs/day of NO_x, and 12.33 lbs/day of CO would be generated by construction equipment. Under the Proposed Project, NO_x emissions would exceed the district's adopted thresholds of 85 lbs/day, resulting in a <i>significant impact</i>.</p>	S	<p>7.3-2 Construction-related ozone precursor emissions. (Project-specific)</p> <p>To reduce NO_x emissions associated with construction activities, the prime contractor shall provide a plan for approval by the City of Sacramento and SMAQMD demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction project, and operated by either the prime contractor or any subcontractor, shall achieve a fleet-averaged 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average, and</p>	SU

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.3-3 Project operational emissions. (Project-specific) As indicated in Table 7.3-5, operational emissions associated with the Proposed Project are estimated to be approximately 375 lbs/day of ROG, 393 lbs/day of NO_x, 3,274 lbs/day of CO, and 131 lbs/day 3.36 µg/m³ of PM₁₀. Under the Proposed Project, ROG and NO_x emissions would exceed SMAQMD's thresholds of 65 lbs/day, resulting in a significant impact.</p>	<p>S</p>	<p>The prime contractor shall submit to the City of Sacramento and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during the construction project. The inventory shall include the horsepower rating, engine production year, and 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 30-day period in which no construction activity occurs.</p> <p>The prime contractor shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and 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 monthly summaries 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 30-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 mitigation measure shall supersede other SMAQMD or state rules or regulations.</p>	<p>SU</p>
<p>7.3-3 Project operational emissions. (Project-specific) Prior to project construction, the project applicant and city shall consult with the SMAQMD to ensure all applicable and feasible mitigation measures are being implemented, which shall include the following:</p> <ul style="list-style-type: none"> a) Bicycle lockers and/or bike racks shall be provided at all office buildings and retail centers. b) Provide an additional 20 percent of required Class I and Class II bicycle parking facilities. 	<p>S</p>	<p>7.3-3 Project operational emissions. (Project-specific) Prior to project construction, the project applicant and city shall consult with the SMAQMD to ensure all applicable and feasible mitigation measures are being implemented, which shall include the following:</p> <ul style="list-style-type: none"> a) Bicycle lockers and/or bike racks shall be provided at all office buildings and retail centers. b) Provide an additional 20 percent of required Class I and Class II bicycle parking facilities. 	<p>SU</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.3-4 CO emissions. (Project-specific) As previously discussed, CO modeling was completed for the six worst intersections for the Proposed Project that were operating at an LOS F and which had the longest delays. All modeling was completed using information provided in the traffic analysis. As shown in Table 7.3-7, none of the intersections would result in a violation of the 1-hour or 8-hour standards for CO. It can be assumed that if the intersections with the most traffic congestion and longest delay times do not violate adopted CO standards, then those intersections that are operating at a similar level but with less traffic and shorter delay times also would not violate adopted CO standards. All CO modeling outputs are located in Appendix C. The highest CO level that is predicted to occur is 3.1 ppm for the 1-hour standard and 2.2 ppm for the 8-hour standard located 50 feet from the roadway at the intersection of Truxel Road and Gateway Park Boulevard. Because these levels are below the 20 ppm 1-hour standard and the 9 ppm 8-hour standard, a <i>less-than-significant impact</i> would occur.</p>	<p>LS</p>	<p>c) A display case or kiosk displaying transportation information in a prominent area accessible to employees and patrons. d) Parking lot shade shall be increased by 20 percent over city code requirements. e) Preferential parking for carpool/ vanpools shall be provided to encourage shared ridership. f) The parking lot design shall include clearly marked and shaded pedestrian pathways between transit facilities and building entrances. g) The project applicant shall require building and/ or property owners contracts with landscapers who operate equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use. h) For all office development, promote telecommuting and implement an employee telecommuting program. i) Implement Clean Air Business Practices such as using low-emission delivery vehicles, contracting with alternative fuel waste hauling companies, etc.</p>	<p>NA</p>
<p>7.3-4 CO emissions. (Project-specific) None required.</p>	<p>LS</p>	<p>7.3-4 CO emissions. (Project-specific) None required.</p>	<p>NA</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.3-5 Criteria air pollutants. (Cumulative) As discussed in the project description, the Proposed Project would require a General Plan Amendment, Community Plan Amendment, and zoning changes to the existing site. Most notably, 101 acres of the site are currently designated for warehouses or similar uses, which produce considerably fewer air emissions because of the lower trip generation rate per 1,000 square feet. To accommodate the Proposed Project, the project site would be redesignated as commercial, office, and retail, all of which would result in more vehicle trips and higher emissions.</p> <p>Furthermore, as noted previously in the section, the project area is located within Sacramento County which is currently designated as non-attainment for both State and federal ozone standards. The primary cause of ozone formation in the region is due to mobile vehicles that generate the pollutants ROG and NO_x, both of which are ozone precursors.</p> <p>Assuming development within the Sacramento Valley Air Basin through the year 2025, development of the site would result in higher emissions than it would if it were built-out in accordance with existing General Plan, Community Plan, and zoning designations, and because the region is designated as severe non-attainment for ozone, the Proposed Project would contribute considerably to a <i>significant cumulative impact</i> to air quality.</p>	<p>S</p>	<p>7.3-5 Critical air pollutants. (Cumulative) Implement mitigation measures 7.3-1 through 7.3-3.</p>	<p>SU</p>
<p>7.3-6 CO emissions. (Cumulative) As previously discussed, CO modeling was completed for the six worst intersections in the vicinity of the project site that were operating at an LOS F and which had the longest delays. All modeling was completed using information provided in the traffic analysis. As shown in Table 7.3-7, none of the intersections under cumulative conditions for the year 2025 would result in a violation of the 1-hour or 8-hour standards for CO. It can be safely assumed that if the intersections with the most traffic congestion and longest delay times do not violate adopted CO standards, then those intersections that are operating at a similar level but with less traffic and shorter delay times also would not violate adopted CO standards. All CO modeling outputs are located in Appendix C. The highest cumulative CO level that is predicted to occur is 3.4 ppm for the 1-hour standard and 2.3 ppm for the 8-hour standard located 50 feet from the roadway at the intersection of Truxel Road and Gateway Park Boulevard. Because these levels are below the 20 ppm 1-hour standard and the 9 ppm 8-hour standard, the impact is not considered cumulatively considerable and a <i>less-than-significant impact</i> would occur.</p>	<p>LS</p>	<p>7.3-6 CO emissions. (Cumulative) None required.</p>	<p>NA</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.3-7 Toxic air contaminant concentrations. (Cumulative) As previously noted, the adopted health risk threshold for exposure to TAC is 10 in 1 million. This means that if a source results in more than 10 excess cancer cases per 1 million people, a significant impact may occur. The local air districts are responsible for regulating and monitoring TACs from stationary sources. Permits, and in some cases the implementation of Best Available Control Technology (BACT) or Maximum Available Control Technology (MACT), are required to ensure that stationary sources do not in and of themselves pose a significant risk to sensitive receptors. However, it is possible for stationary sources, that individually do not exceed the adopted risk threshold of 10 in 1 million to cumulatively exceed the adopted risk threshold of 10 in 1 million when numerous facilities are operated simultaneously. At the present time, there are no known stationary sources within the vicinity of the project site that emit TACs. Implementation of the Proposed Project is not anticipated to result in the construction of stationary sources that emit TACs. In the event any facilities are constructed, they would be required to comply with the rules and regulations of local air districts to ensure that the health risk of 10 in 1 million is not exceeded.</p> <p>In 1998 the CARB identified diesel particulate matter as a toxic air contaminant. Diesel particulate differs from other TACs in that it is generated primarily by mobile sources. The risk to sensitive receptors associated with exposure to this TAC depends upon a number of factors, including the wind direction, wind speed, concentration of the diesel particulate matter, the length of exposure, the existing concentration of diesel particulate matter in the air, and the distance from the source. The CARB currently estimates that the existing overall risk level associated with diesel particulate matter in California is estimated to be 540 excess cancer cases per 1 million people. Consequently, the existing risk level is higher than the adopted threshold of 10 in 1 million.</p> <p>With implementation of the Proposed Project, diesel powered trucks would be used to deliver and distribute material goods associated with development of the site. Diesel trucks would be used to deliver automobiles to the proposed automall. Similarly, diesel trucks would be used to transport goods to retail and commercial uses on the site. In addition to delivery trucks associated with the project and alternatives, both the project site and off site alternative are located adjacent to an existing freeway.</p>	<p>S</p>	<p>7.3-7 Toxic air contaminant concentrations. (Cumulative) The trucks used for delivering materials to the project site are not owned or operated by the project applicant, and therefore retro-fitting existing engines with diesel particulate filters, requiring the use of alternative fuels, and/or purchasing new trucks that meet the new, stricter diesel particulate matter emission standards are not feasible mitigation measures. Any mitigation to reduce the magnitude of this impact must be implemented by the CARB and would occur over time as stricter emissions requirements are adopted and implemented.</p> <p>Because there are no feasible mitigation measures available to reduce the magnitude of this impact, it would remain <i>significant and unavoidable</i>.</p>	<p>SU</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>Although there are no residential homes within the project site, people would work within the project site for an average of 8 hours per day and 5 days per week. In some cases the work schedule may be slightly less or more. During the time the employee is working within the project site or off site alternative, they would be exposed to TACs associated with the delivery trucks and existing freeway traffic.</p> <p>The CARB has produced a series of risk characterization scenarios as an Appendix to the <i>Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles</i>. The scenario that most closely resembles the Proposed Project is known as the "Low Volume Freeway". In this scenario, the freeway has three lanes in each direction and receptors were placed as close as 20 meters from the edge of the freeway. It was assumed that there was a flow of 2,000 trucks per day. Based on this scenario, the health risk was estimated to be 200 excess cancer cases per million people based on 70 years of exposure.² This estimated risk exceeds the threshold of 10 excess cancer cases per million people.</p> <p>While this low volume freeway scenario can be applied to the Proposed Project, it is important to note that there are differences between this scenario and the project site. Most notably, although the Interstate-80 freeway is located immediately adjacent to the project site, most likely setback requirements and the design of the project would result in a distance that is greater than 20 meters between sensitive receptors (employees) and the existing freeway.</p> <p>Traffic volumes along west bound I-80 that were recorded at the Northgate/I-80 intersection were estimated to be 126,000 vehicles per day. The number of vehicles estimated for the east bound lanes at the same intersection were estimated to be 104,000 vehicles per day.³</p>			

2 California Air Resources Board. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. Stationary Source Division, Mobile Source Control Division. October 2000, Appendix VII.

3 California Department of Transportation. www.dot.ca.gov/hg/traffops/saferest/terafdata/1999, website accessed December 11, 2002.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>The CARB has not produced a risk scenario analyzing the potential impacts associated with the exposure of diesel particulate matter for trucks making deliveries that would be comparable to operation of the Proposed Project. However, the CARB has produced a risk scenario for idling school buses, which would most closely resemble the risk associated with diesel trucks delivering products to the project site. In this scenario, the diesel particulate matter emissions from the loading and unloading of school children was quantified and the associated health risk was estimated. It was assumed that the buses were idling between 2 and 15 minutes while the children were loading and unloading. The risk associated with this scenario was estimated to be 90 excess cancer cases per million people based on 70 years of exposure. This estimated risk scenario also exceeds the threshold of 10 excess cancer cases per million people.</p> <p>Furthermore, it should be noted that the project site is located adjacent to an existing light industrial area. This area currently delivers and distributes goods via diesel trucks on a daily basis. The same is also true of the existing Natomas Market Place, which also receives deliveries from diesel powered trucks on a daily basis.</p> <p>Diesel particulate matter is a unique TAC in that it is generated by mobile sources, which are currently unregulated by local air districts. However, mobile source emissions, including diesel particulate matter are regulated by the CARB, a State entity. The CARB has derived a number of strategies for reducing diesel particulate matter. These strategies include retro-fitting existing engines by installing a diesel particulate filter, using alternative fuels, and stricter emission control standards for all new engines.</p> <p>Although the risk scenarios presented here for comparison represent a worst-case scenario, since they assume an individual will receive continuous maximum exposure to the TAC for 70 years (the estimated lifetime of an individual), and although the Proposed Project's individual contribution to diesel particulate matter within the area would be minimal, development of the Proposed Project in combination with other development in the region could still expose employees to a substantial risk that is greater than the adopted 10 in 1 million threshold. Therefore, this would be a <i>significant cumulative impact</i>.</p>	LS		NA
7.4-1 Noise			
7.4-1 Construction Noise. (Project-specific) Activities associated with construction within the project area would result in elevated noise levels within the project area, with maximum noise levels as shown in Table 7.4-7.	LS	7.4-1 Construction Noise. (Project-specific) None required.	NA

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature and would occur during normal daytime working hours. Construction activities would be required to adhere to the requirements of the City of Sacramento Noise Ordinance with respect to hours of operation, muffling of internal combustion engines, and other factors that affect construction noise generation. The nearest sensitive receptors are new residences and are a distance away from the site to the northwest. Because there are no sensitive receptors in the immediate project vicinity that would be adversely affected by construction noise, this impact is considered <i>less than significant</i>.</p>	S	<p>7.4-2 Traffic Noise. (Project-specific) None available.</p>	SU
<p>7.4-3 Commercial Loading Dock and Related Noise Levels. (Project-specific) The project site is not adjacent to existing or planned residential uses. Noise-producing aspects of commercial loading docks and associated commercial noise sources on the project site are predicted to produce noise levels of less than 35 dB Leq and 50 dB Lmax at the nearest land uses. Pursuant to the City's Noise Ordinance criteria shown in Table 7.4-4, noise associated with commercial loading docks exceeding 50 dB Leq and 70 dB Lmax would be considered significant during daytime hours. During nighttime hours, the City noise standards are 10 dB more restrictive. Because of the considerable distance between the on-site project-related noise sources and the nearest residential uses, noise generated by on-site noise sources are not predicted to exceed the City's Noise Ordinance standards. Therefore, this is considered a <i>less-than-significant impact</i>.</p>	LS	<p>7.4-3 Commercial Loading Dock and Related Noise Levels. (Project-specific) None required.</p>	NA

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.4-4 Traffic Noise. (Cumulative) The Proposed Project would generate increased traffic on the existing roadway network. Under the Proposed Project, traffic noise level increases are predicted to be 4 dB or more on seven roadway segments on weekdays and nine roadway segments on weekends, as indicated by Table 7.4-6. As indicated in these tables, there would be a 5 dB increase on the east segment of the Truxel/Arena intersection during weekdays and weekends. Because there are noise-sensitive land uses in the vicinity of Truxel and Arena, this is considered a <i>significant impact</i>.</p>	S	<p>7.4-4 Traffic Noise. (Cumulative) None available.</p>	SU
7.5 Public Services and Utilities			
<p>7.5-1 Increased demand for police protection services. (Project-specific) The Proposed Project would result in an increase of approximately 4,184 employees, but would not result in a population increase in the North Natomas area. The Sacramento Police Department would provide service to the project from the North Station. No new officers would be necessary in order to maintain the NNC's 1.6/1,000 officer-to-population ratio because there would be no increase in population. In addition, increases in call volume associated with the project would not significantly increase response times.⁴ This is considered a <i>less-than-significant impact</i>.</p>	LS	<p>7.5-1 Increased demand for police protection services. (Project-specific) None required.</p>	NA
<p>7.5-2 Increased demand for police protection services. (Cumulative) Development in the North Natomas area and its associated effects on law enforcement services were taken into account in the North Natomas Community Plan. Rapid development in the North Natomas area will require that police services be augmented in order to accommodate increasing demand from the area's growing population. The Proposed Project would not cause a population increase in the North Natomas area, and therefore would not significantly contribute to the need for additional police services in the area. This impact would be considered cumulatively <i>less than significant</i>.</p>	LS	<p>7.5-2 Increased demand for police protection services. (Cumulative) None required.</p>	NA

4 Jim Hyde, City of Sacramento Police Department, personal communication, July 17, 2002.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.5-3 Increased demand for fire protection services. (Project-specific)</p> <p>The Proposed Project would result in the generation of approximately 4,184 employees, but would not directly result in a population increase in the North Natomas area. The Sacramento Fire Department would provide service to the project primarily from Station 81.</p> <p>Although the Proposed Project would not create a new population that would result in the need for new fire protection staff or facilities, the Promenade at Natomas would result in large-scale development on a site that is currently undeveloped, and could result in a slightly higher emergency call volume in the event of fire or situations requiring EMT services. Response times could also be compromised by the addition of more emergency trips. However, it is not anticipated that the Proposed Project would create a substantial increase in demand for fire protection services that would compromise the current 5-minute response time or otherwise prevent the SFD from providing adequate service. This is considered a <i>less-than-significant impact</i>.</p>	LS	<p>7.5-3 Increased demand for fire protection services. (Project-specific)</p> <p>None required.</p>	NA
<p>7.5-4 Increased demand for fire protection services. (Cumulative)</p> <p>Development in the North Natomas area and its associated effects on fire protection services were taken into account in the North Natomas Community Plan. Rapid development in the North Natomas area will require that fire protection services be augmented in order to accommodate increasing demand from the area's growing population. The Proposed Project would not cause a population increase in the North Natomas area, and therefore would not significantly contribute to the need for additional fire protection services in the area. This cumulative impact would be considered <i>less than significant</i>.</p>	LS	<p>7.5-4 Increased demand for fire protection services. (Cumulative)</p> <p>None required.</p>	NA
<p>7.5-5 Increased demand for potable water. (Project-specific)</p> <p>Table 7.5-2 shows the estimated water demand for the Proposed Project. As stated above under the Environmental Setting, the City of Sacramento currently has water rights for a total of 192,000 AFY from the Sacramento and American Rivers, and a maximum of 326,800 AFY from the Sacramento and American Rivers for the year 2030 and beyond. The Proposed Project would result in water demand of 341 AFY. With an average excess water supply of 54,250 AFY, the existing City of Sacramento water rights would be adequate to accommodate the Proposed Project. Therefore, this is considered a <i>less-than-significant impact</i> for the Proposed Project.</p>	LS	<p>7.5-5 Increased demand for potable water. (Project-specific)</p> <p>None required.</p>	NA

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.5-6 Increased demand for water treatment and/or infrastructure. (Project-specific)</p> <p>The Proposed Project would use a system of 12-inch lines that would tie into existing 12-inch lines located in the nearby public rights of way along Truxel Road and Gateway Park Boulevard.⁵ A 12-inch water main extension is required for the project in Gateway Park Blvd. from Truxel Road to the north property line of the project (approximately 1600 feet). This infrastructure would be adequate to handle the water demand created by the Proposed Project.</p> <p>Table 7.5-2 shows the estimated water demand of the Proposed Project. As stated above under the Environmental Setting, the Sacramento River Water Treatment Plant and the E.A. Fairbairn Water Treatment Plant have reliable capacities of 110 mgd and 90 mgd, respectively, for a total reliable water treatment capacity of 190 mgd. In addition, a 100-mgd expansion to the Fairbairn Water Treatment Plant and a 50-mgd expansion of the Sacramento River Treatment Plant are currently under construction.⁶ This water treatment infrastructure would be adequate to accommodate the Proposed Project. Therefore, this is considered a <i>less-than-significant impact</i> for the Proposed Project.</p>	<p>LS</p>	<p>7.3-3 Increased demand for water treatment and/or infrastructure. (Project-specific)</p> <p>None required.</p>	<p>NA</p>
<p>7.5-7 Increased demand for potable water. (Cumulative)</p> <p>The City of Sacramento currently has an average excess water supply of 54,250 AFY, available to supply existing and future planned projects. Rapid development in the North Natomas area will increase demand for potable water from the area's growing population. According to the 1988 SGPU EIR, maximum water demand in the year 2016 (buildout year) would be approximately 368.2 mgd (412,438 AFY).⁷ The Proposed Project is anticipated to contribute 341 AFY (0.304 mgd). These demands would not significantly contribute to reducing the available water supply. Therefore, this impact would be cumulatively <i>less than significant</i>.</p>	<p>LS</p>	<p>7.5-7 Increased demand for potable water. (Cumulative)</p> <p>None required.</p>	<p>NA</p>

5 Dave Schamber, Supervising Engineer, City of Sacramento Department of Utilities, personal communication, April 15, 2002.
 6 Kathy Mullen, Water and Sewer Superintendent, City of Sacramento Department of Utilities, personal communication, March 1, 2001.
 7 City of Sacramento, *Sacramento General Plan Update Draft Environmental Impact Report*, March 1987, page H-5.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.5-8 Increased demand for water treatment and infrastructure. (Cumulative)</p> <p>Rapid development in the North Natomas area will require additional water treatment facilities and infrastructure. As stated above under Impact 7.5-6, the Proposed Project would use a system of 12-inch lines that would tie into existing City infrastructure and water would be treated at the Sacramento River Water Treatment Plant or the Fairbairn Water Treatment Plant. With the planned expansion of both treatment plants, there would be adequate capacity to serve the planned growth under the NNCP. As stated under Impact 7.5-7, the Proposed Project would contribute 0.304 mgd, which would not constitute a cumulatively considerable increase in water treatment for the North Natomas area or the City of Sacramento, and therefore would not significantly contribute to cumulative treatment or water infrastructure impacts in the area. This impact would be considered cumulatively <i>less than significant</i>.</p>	LS	<p>7.5-8 Increased demand for water treatment and infrastructure. (Cumulative)</p> <p>None required.</p>	NA
<p>7.5-9 Increased demand for City wastewater collection, treatment, and disposal. (Project-specific)</p> <p>Table 7.5-3 shows the estimated wastewater demand of the Proposed Project. As stated above under the Environmental Setting, the Regional Plant has a current capacity of approximately 390 mgd, and currently receives approximately 181 mgd. The Proposed Project would contribute a demand of 0.210 mgd. The remaining capacity of approximately 209 mgd at the wastewater treatment facility would be adequate to accommodate wastewater treatment demand under the Proposed Project. In addition, the Phase 1 trunk lines planned under the CSD-1 Master Plan would provide adequate wastewater conveyance infrastructure to meet this demand. Therefore, this is considered a <i>less-than-significant impact</i> for the Proposed Project.</p>	LS	<p>7.5-9 Increased demand for City wastewater collection, treatment, and disposal. (Project-specific)</p> <p>None required.</p>	NA

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.5-10 Increased demand for wastewater collection, treatment, and disposal. (Cumulative)</p> <p>Development in the North Natomas area will require additional wastewater treatment facilities in order to accommodate increasing demand from the area's growing population. According to the 1988 SGPU EIR, maximum wastewater demand in the year 2016 (buildout year) would be approximately 129.1 average daily dry-weather flow and 305.9 mgd peak wet weather flow.⁸ The Proposed Project would contribute 0.210 mgd to this demand. The addition of 0.210 mgd would not constitute a substantial increase in wastewater treatment demand for the North Natomas area or the City of Sacramento, and therefore would not be considered a cumulatively considerable contribution. In addition, adequate infrastructure would be available to serve the Proposed Project; therefore there would be no contribution to adverse impacts on wastewater infrastructure. This would be considered a <i>less than significant cumulative impact</i>.</p>	LS	<p>7.5-10 Increased demand for wastewater collection, treatment, and disposal. (Cumulative)</p> <p>None required.</p>	NA
<p>7.5-11 Increased demand for electricity and natural gas service. (Project-specific)</p> <p>The Proposed Project would construct approximately 751,000 sf of Regional Commercial land uses, and approximately 504,000 sf of Employment Center uses. Using SMUD's electricity demand rates for Commercial land uses, the projected electricity demand for the Proposed Project would be approximately 10,315 KW/day. SMUD has indicated that it could accommodate electricity demand created by the Proposed Project.⁹ With regard to natural gas services, PG&E has indicated that gas distribution lines and other existing infrastructure have ample capacity to serve the project site.¹⁰ Therefore, this is considered a <i>less-than-significant impact</i>.</p>	LS	<p>7.5-11 Increased demand for electricity and natural gas service. (Project-specific)</p> <p>None required.</p>	NA

8 City of Sacramento, *Sacramento General Plan Update Draft Environmental Impact Report*, March 1987, page I-5.
 9 Gene Hoppes, Engineering Designer 4, Sacramento Municipal Utilities District, personal communication, February 5, 2002.
 10 Hal Hackney, Gas Planning Engineer, PG&E, personal communication, October 16, 2002.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>It is possible that not all environmental conditions have been reported or identified at the project site, such as buried disposal sites, trash pits, or other underground storage devices. The presence of any of these, either on or adjacent to the project site, could generate conditions that could be a hazard to public health and the environment. Unclearing of any of the aforementioned unknown/potential sites could generate toxic or flammable conditions that could present immediately dangerous situations. The unknown presence and potential discovery of unknown hazards during site preparation and construction (excavation and grading) of the Proposed Project is considered a <i>potentially significant impact</i>.</p>	<p>LS</p>	<p>(b) If, during construction activities for the Proposed Project, evidence of hazardous materials contamination is observed or suspected through either obvious or implied measures (i.e., stained or odorous soil, or oil or discolored water), construction activities shall cease in the affected area. An environmental professional shall assess the situation and make appropriate recommendations.</p>	<p>NA</p>
<p>7.6-2 Safety hazards during construction. (Project-specific) Hazardous materials would be used in varying amounts during construction activities at the project site. Construction and equipment maintenance activities would use hazardous materials, such as: fuels (gasoline and diesel); oils and lubricants; paints and paint thinners; glues; cleaners (which could include solvents and corrosives in addition to soaps and detergents); and pesticides and herbicides. However, consistent with federal, State, and local laws and regulations addressing hazardous materials management and environmental protection, construction specifications would include the following requirements in compliance with applicable regulations and codes, including, but not limited to, Titles 8 and 22 of the Code of California Regulations, Uniform Fire Code, and Division 20 of the California Health and Safety Code: all reserve fuel supplies and hazardous materials must be stored within the confines of a designated construction area; equipment refueling and maintenance must take place only within the staging area; construction vehicles shall be inspected daily for leaks; and a Spill Prevention Countermeasure and Control (SPCC) plan shall be prepared and implemented. In addition, all transportation of hazardous materials to and from the site must comply with DOT and Caltrans regulations.</p> <p>The types and amounts of hazardous materials used during construction of the Proposed Project would vary according to the nature of the activity; therefore, the specific hazardous materials and amounts that would be on site or transported cannot be determined at this time. In some cases, it is the <i>type</i> of hazardous material that is potentially hazardous; in others, it is the <i>amount</i> of hazardous material that could present a hazard. In any case, because development that would occur as a result of the Proposed Project would be required to comply with all federal, State, and local laws and regulations governing the use, storage, transportation, and disposal of hazardous materials during construction of the proposed UCP, this impact is considered <i>less than significant</i>.</p>	<p>7.6-2 Safety hazards during construction. (Project-specific) None required.</p>	<p>NA</p>	<p>NA</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.6-3 Safety hazards. (Project-specific) Nearly all of the land uses at the project site, involving the Proposed Project, would involve some level of use or storage of hazardous materials. In each case, the potential hazards would depend on what materials would be used, where the materials would be used, how they would be used, and who would use them. Retail and office-based businesses, such as those proposed for the project site, would generally use relatively small quantities of household-related hazardous materials when compared to other businesses, such as those engaged in manufacturing, research and development, light manufacturing, or automotive repair (service stations). Businesses that handle larger quantities of hazardous materials would often also use a wider variety of materials, which could include less common materials and acutely hazardous materials. Businesses that handle larger quantities of hazardous materials and acutely hazardous materials would also be subject to more regulation and oversight than businesses that handle smaller quantities of more common materials. In addition, employees of businesses that handle large quantities of hazardous materials would also typically receive special training (often required by law under OSHA) to help them understand the potential hazards they could encounter in the workplace. Although individual businesses use relatively small volumes of hazardous materials, the total volume of the hazardous materials managed by all of the businesses at the project site could be substantial, which would increase the opportunities for accidents and improper use, storage, and disposal. Because many hazardous materials are consumed through their use (i.e., fuel, paint, aerosols), the quantity of hazardous materials handled and stored would be greater than the volume of hazardous waste generated. In any case, the SCEMD has a hazardous waste collection program that safely collects, transports, and disposes of residual hazardous wastes, and commercial products are labeled to inform users of potential risks and to instruct users in appropriate handling procedures. The use of common hazardous materials is typically considered to pose an acceptable level of risk.</p>	<p>LS</p>	<p>7.6-3 Safety hazards. (Project-specific) None required.</p>	<p>NA</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>The SCEMD, as the local CUPA for the Proposed Project, oversees federal and State hazardous materials registrations, underground storage tank programs, aboveground petroleum storage tank spill prevention control and countermeasure plans, risk management plans, and some fire safety planning. Additionally, businesses are regulated as employers by Cal/OSHA and are therefore required to ensure employee safety. Specific requirements include identifying hazardous materials in the workplace, providing safety information to workers that handle hazardous materials, and adequately training workers. Because of this regulatory structure, the business-related use of relatively small quantities of hazardous materials similar to household products would not pose greater risks than the use of such materials by households. For this reason, the use of relatively small quantities of common hazardous materials by businesses would not create substantial public health hazards.</p> <p>In addition, if businesses at the project site were to use relatively large quantities of hazardous materials (in comparison to office-based businesses) they could be subject to the requirements of the CalARP program. If properly managed (as is assumed and required by the Division of Environmental Health and State law), hazardous chemicals would generally pose minimal health and safety risks at the project site. Also, any facilities operating on the project site that use hazardous materials would be subject to the Hazardous Substance Management requirements presented in the North Natomas Community Plan, which include siting criteria, the preparation of a Hazardous Substance Management Plan, and hazardous material storage facility design. Because of the existing regulatory structure, the potential effect of this impact is considered <i>less than significant</i>.</p>	<p>LS</p>	<p>7.6-4 Interference with an emergency response or evacuation plan. (Project-specific)</p> <p>None required.</p>	<p>NA</p>
<p>7.6-4 Interference with an emergency response or evacuation plan. (Project-specific)</p> <p>The project site is located along the north side of I-80 near the intersection of Truxel Road and Gateway Boulevard. Currently, the project site is undeveloped and used for agriculture. No roads exist on the project site. As noted in Section 7.2, Traffic and Transportation, the roadways leading to and from the project site would allow for emergency response vehicles to easily access the project site, as well as the adjacent properties, if an emergency were to occur, be it fire, hazardous material spill, or some other type of safety-related catastrophe. Development of the Proposed Project, would improve emergency response capabilities by including roadway and street access into the interior of the project site.</p>	<p>LS</p>	<p>7.6-4 Interference with an emergency response or evacuation plan. (Project-specific)</p> <p>None required.</p>	<p>NA</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>Because the project site is undeveloped and is used for agriculture, there is no evacuation plan in operation at the project site. The Proposed Project would include construction of roadways that link to the surrounding area, so upon development of the project site, should an emergency occur, people and vehicles would be able to leave the site. In addition, the proposed roadways would not block or substantially change adjacent properties' transportation routes, so evacuation from those properties would not be altered.</p> <p>Because the Proposed Project would not interfere with emergency response or evacuation plans, this is considered to be a <i>less-than-significant impact</i>.</p>			
<p>7.6-5 Increase in hazardous materials use, storage, and transportation. (Cumulative)</p> <p>The cumulative context for hazardous materials-related impacts is the area within the boundaries of the City of Sacramento General Plan. As discussed in Impacts 7.6-2 and 7.6-3, construction and occupancy of the buildings associated with the Proposed Project would involve the transportation, use, and storage of various types and various amounts of hazardous materials, which would increase the frequency of hazardous material transport and the volume of hazardous materials being transported. However, because of the existing federal, State, and local regulatory framework overseeing the use of hazardous materials, the effects on the cumulative context would be <i>less than significant</i>.</p>	LS	<p>7.6-5 Increase in hazardous materials use, storage, and transportation. (Cumulative)</p> <p>None required.</p>	NA
7.7 Hydrology and Water Quality			
<p>7.7-1 Increased stormwater runoff. (Project-specific)</p> <p>The project site is currently undeveloped and has previously been used for agriculture. The topography of the project site is flat, and has an elevation between 9 and 10 feet above msl. Sheet runoff does not occur at the project site, and surface water runoff either evaporates into the atmosphere or infiltrates into the ground. Because the project site is underlain by poorly drained soils that maintain a generally high groundwater table, and due to the near-surface impervious clayey nature of the soils at the project site, rainwater tends to pond on-site when the underlying soils become saturated. The project site is also surrounded by a slight earthen berm, so surface water does not run onto the project site.</p>	LS	<p>7.7-1 Increased stormwater runoff. (Project-specific)</p> <p>None required.</p>	NA

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>The drainage modeling conducted for the Proposed Project in September 2002 determined that two detention basins would be required to provide storage for surface water runoff at the project site. However, final design may determine that only one basin is required (Basin B). Figure 7.7-1 shows the approximate locations of the proposed detention basins, as well as the proposed configuration of the drainage system. Basin A (identified as DB-A on Figure 7.7-1) would be a dry detention basin located in the northeast portion of the project site, and Basin B (identified as DB-B) would be a linear wet retention/detention basin located along the southern boundary of the project site adjacent to I-80. These basins would drain to RD 1000 facilities. Once in the RD 1000 system, drainage from the project site would ultimately flow to the Sacramento River via the East Drainage Canal and the Natomas Main Drainage Canal.</p> <p>Basin A (Parcel 33) would be a 2.3±acre dry basin located in the northeast corner of the project site. The basin would have grass and would be designed to fill during moderate rainstorms.</p> <p>Basin A would have slopes with a ratio of about 5 to 1 (horizontal to vertical) and would be graded to minimize long-term ponding. Depending on adjacent land use, this basin could have a multi-use purpose as a park or nature area. The bottom elevation of Basin A would be approximately 5± feet below ground surface (ground surface is at 10 feet msl). Basin B would be linear in shape and is designed to permanently hold stormwater runoff, essentially as an on-site pond. Basin B is designed to have a permanent pool of approximately 6± acre-feet of water at elevation 4.0± feet. Basin B is expected to be landscaped with a walking path.¹⁴</p>			

14 Watermark Engineering, Inc., Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, p.6.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>In addition to the conveyance and storage infrastructure, a pump station would be constructed as part of the Proposed Project. The final configuration would be required to meet discharge rates specified by RD 1000.</p> <p>Retaining walls up to 3± feet high would be used to increase storage capacity while maintaining gentle slopes. Table 7.7-1 provides a summary of the two detention basins, showing the land area required to contain a given volume of surface water runoff, and at what approximate depth the water in the basins would be when storing that volume. Table 7.7-2 illustrates the approximate elevation of water in each basin during a storm event. As illustrated by the data in Table 7.7-2, the detention basins are designed to effectively accept flows from the various design storms.</p> <p>In summary, the Proposed Project has identified a drainage system to adequately convey and store projected on-site stormwater runoff that would be consistent with discharge criteria established through agreements between RD 1000 and the City of Sacramento.¹⁵ Because the Proposed Project can be accommodated within the existing RD 1000 drainage system and would not increase the potential for on- or off-site flooding over that which currently exists, the impact is considered to be <i>less than significant</i>.</p>	LS	7.7-2 Urban contaminants in stormwater runoff associated with project construction and operation. (Project-specific)	NA
<p>7.7-2 Urban contaminants in stormwater runoff associated with project construction and operation. (Project-specific)</p> <p>Construction</p> <p>Implementation of the Proposed Project would require grading land for roadways, building foundations, parking areas, and landscaping. In addition, construction activities, such as excavation and trenching for utilities, would disturb soil. Construction site runoff, as well as dust generated from other sites, could contain soil and sediment, which could enter receiving waters and degrade water quality. Spills or leaks from heavy equipment and machinery (petroleum products and/or heavy metal), staging areas, or building sites (paints, solvents, and cleaning agents) could also adversely affect receiving water quality by polluting runoff. These potential impacts would generally be short-term and limited to the duration of construction.</p>	LS	7.7-2 Urban contaminants in stormwater runoff associated with project construction and operation. (Project-specific)	None required.

15 Patrick Stiehr, Watermark Engineering, Inc., personal communication, October 16, 2002.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>Prior to the initiation of site disturbing or construction activities at the project site, the project applicant would be required to obtain a General Construction Activity Stormwater Permit from the CVRWQCB. As indicated in the Regulatory Setting, General Permit applicants are required to submit a Notice of Intent (NOI), develop and implement a Stormwater Pollution Prevention Plan (SWPPP), eliminate or reduce non-stormwater discharges, and perform inspections of all BMPs. Examples of typical construction BMPs include, but are not limited to: erosion control BMPs such as mulch, hydroseeding, geotextiles and mats, and soil binders; sediment control BMPs such as silt fences, fiber rolls, gravel bags and storm drain inlet protection; and housekeeping practices such as stabilized construction entrances, vehicle fueling, spill prevention and control, and management of solid waste, concrete, paint, etc.</p> <p>In addition to the General Construction permit, the project applicant would be required to obtain a grading permit and prepare an erosion and sediment control plan (ESC Plan) in accordance with the Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control. The ESC Plan should include erosion control BMPs, sediment control BMPs and housekeeping practices to be implemented during construction.</p> <p>If groundwater were encountered during construction, the project applicant could be required to obtain and comply with the waste discharge requirements of the Central Valley RWQCB's General Order for Dewatering and Other Low-Threat Discharges to Surface Waters. The dewatering permit specifies standards for testing, monitoring, and reporting receiving water limitations and discharge prohibitions.</p>			

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p><u>Operation</u></p> <p>Implementation of the Proposed Project would create a substantial amount of impervious surfaces through the construction of building foundations, parking lots, and roadways that would collect urban pollutants. Currently, the project site is undeveloped and surface water runoff is contained on-site by low berms surrounding the project site. Upon development of the site, a drainage system would collect surface water runoff and discharge it into RD 1000's adjacent drainage system. Currently (pre-development), surface water runoff collected at the project site could contain sediment containing nutrients, naturally occurring metals and minerals, and organic matter. Upon development of the project site, activities that could increase the types and quantities of agricultural and non-naturally occurring pollutants in runoff include motor vehicle operations, landscaping maintenance, littering, careless storage and handling of materials, wildlife wastes, and pavement wear. Pollutants typically associated with urban uses, such as those that could be developed as a result of the Proposed Project, would include oil and grease, coliform bacteria, petroleum hydrocarbons (gasoline and diesel fuel), heavy metals such as lead, copper and zinc, suspended solids, and pesticides and herbicides not previously applied at the project site.</p> <p>In order to control urban pollutants, operation of the Proposed Project would be required to comply with the City of Sacramento's municipal stormwater NPDES permit and Stormwater Ordinance (Chapter 13.16) of the Sacramento City Code. The Stormwater Ordinance would include installation of structural and non-structural BMPs to control urban pollutants. Specific source-control and treatment control measures would be required in accordance with the City of Sacramento <i>Guidance Manual for On-Site Stormwater Quality Control Measures and Utilities Procedures Manual</i>.</p> <p>Use of water quality BMPs is also required under the agreement established between RD 1000 and the City of Sacramento, and the Proposed Project Preliminary Drainage Master Plan has identified design parameters for the two basins that are intended to reduce pollutants in runoff discharged to the RD 1000 canal. However, final design may determine that only one basin is required (Basin B). Basin A would function as a dry-extended Sato basin. The bottom of the basin has a gentle slope, and the flow line from the inflow pipe to the outflow would include a meander to lengthen the travel path. Grass on the bottom of the basin would also retard the flow. Such features provide a longer period of time for pollutants to settle out of stormwater before it is released from the basin. Details of final grading, landscape, and vegetation would be provided to the City of Sacramento as site plans are refined. During small storm events,</p>			

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>and during dry weather flows, a pipe would connect Basin A to Basin B to allow for stormwater to bypass Basin A and settle in Basin B, allowing Basin A to remain dry during most of the year. Basin B would have a permanent pool of approximately 6 acre-feet at elevation 4.0 feet. The basin would be used as a combination wet pond and dry extended Sato basin. The pumping would be delayed and/or regulated by the low-flow pump to lengthen the residence time of the runoff. The basin would be emptied over a period of about 48 hours, consistent with adopted drainage criteria for North Natomas.¹⁶</p> <p>Because stormwater originating from the project site, during construction and operation, would be highly regulated by federal and State permit requirements, as well as the requirements of the Sacramento City Code and agreements established between RD 1000 and the City of Sacramento, this impact, for the Proposed Project, is considered to be <i>less than significant</i>.</p>			
<p>7.7-3 Flooding conditions and water quality in the Sacramento River watershed. (Cumulative)</p> <p>The cumulative context for hydrology and water quality issues is the RD 1000 area tributary to the Sacramento River in the Lower Sacramento watershed.</p> <p>The Proposed Project has identified a drainage system to adequately convey and store projected on-site stormwater runoff that would be consistent with discharge criteria established through agreements between RD 1000 and the City of Sacramento. As previously noted, the proposed drainage facilities have been configured to allow land use changes without affecting the drainage study.</p>	LS	<p>7.7-3 Flooding conditions and water quality in the Sacramento River watershed. (Cumulative)</p> <p>None required.</p>	NA

¹⁶ Watermark Engineering, Inc., Preliminary Drainage Master Plan for Promenade at Natomas (Fong Ranch), September 2002, pp.9-10.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>The Proposed Project's contribution to cumulative drainage and flooding impacts would not be cumulatively considerable. Drainage criteria were developed to ensure sufficient capacity exists in the RD 1000 system to convey flows from the North Natomas area, including the project site, and to minimize the potential for downstream flooding in areas served by RD 1000 and along the Sacramento River.¹⁷ Other future development in the North Natomas Community Plan area that discharge to RD 1000 facilities would be required to develop and implement drainage systems that meet established flow criteria because of agreements established between the City and RD 1000. Therefore, the Proposed Project, in combination with other development in the RD 1000 service area, would not increase the potential for downstream flooding, and the cumulative impact is considered to be <i>less than significant</i>.</p> <p>The Proposed Project's contribution related to discharge of urban pollutants into the Sacramento River watershed would not be cumulatively considerable. Water quality protection measures at the project site would be subject to the requirements of the Basin Plan, and would be enforced through the applicable requirements of the Central Valley RWQCB's NPDES permits, as well as City NPDES municipal stormwater requirements. In addition, development in the City is required to include water quality treatment in drainage system design, as described for the Proposed Project. Compliance with these federal and State requirements and RD 1000/City of Sacramento water quality protection standards would help to protect the quality of water in the Lower Sacramento watershed as a result of urban runoff from the North Natomas Community Plan area.</p> <p>Therefore, cumulative impacts would be <i>less than significant</i>.</p>	S	1	LS
7.8 Biological Resources			
<p>7.8-1 Fill of jurisdictional waters of the United States. (Project-specific)</p> <p>The drainage canals that are located along the western and southern boundaries of the project site may be subject to the jurisdiction of the Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. If the drainage canals fall under the jurisdiction of the Corps, any project activities that result in discharge or placement of fill material into these canals would require a wetland delineation and permit under Section 404 of the Clean Water Act.</p>	S	<p>7.8-1 Fill of jurisdictional waters of the United States. (Project-specific)</p> <p>(a) If it is determined that project construction activities will not result in the discharge or placement of fill materials (which include, but are not limited to construction materials such as culverts or support structures) in the canals that are located along the western and southern boundaries of the project site, impacts to habitats near the canal can be mitigated through implementation of Mitigation Measure 7.8-3(a) and (b).</p>	LS

17 Patrick Stiehr, Watermark Engineering, Inc., personal communication, October 16, 2002.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NIA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>The Proposed Project proposes to construct a roadway across the canal located along the western boundary of the project site for the Proposed Project. Impacts to habitats near the canal associated with construction of a roadway can be mitigated through compliance with the Natomas Basin HCP providing no fill is placed in the canal. However, if placing a culvert or support structure in the canal were required to construct the roadway, a wetland delineation and permit would be required. These standards also apply to any construction activities that could impact the drainage canals located along the southern boundaries of the project site for the Proposed Project. Impacts to jurisdictional Waters of the United States are considered <i>significant impacts</i>.</p>		<p>Or</p> <p>(b) If it is determined that project construction activities will result in the discharge or placement of fill materials (which include, but are not limited to construction materials such as culverts or support structures) in the canals that are located along the western and southern boundaries of the project site, the project applicant shall retain a qualified biologist to prepare a wetland delineation and mitigation plan that provides for: (1) identification of waters of the U.S. that could be impacted by the Proposed Project, (2) avoidance of or no net loss of waters of the U.S. in the project area, and (3) the compensation methodologies for project impacts on waters of the U.S. The delineation and mitigation plan shall be submitted for review and approval by the Corps prior to initiation of construction, and shall include a five-year monitoring program to ensure success.</p> <p>Or</p> <p>(c) In lieu of developing a mitigation plan that outlines the avoidance or creation of waters of the U.S., the project applicant shall purchase mitigation credits through a Corps-approved mitigation bank. The purchased credits shall fully offset the acreage and value of waters of the U.S. lost due to project construction.</p> <p>These measures may be implemented by obtaining applicable permits from the Army Corps of Engineers and CDFG.</p>	LS
<p>7.8-2 Removal of street trees and heritage trees. (Project-specific)</p> <p>There are no trees located within the project site. However, there are several large willow trees adjacent to the drainage canal on the western boundary of the Proposed Project site, as well as ornamental trees growing adjacent to the southern and eastern boundaries of the project site near the southern drainage canal. Implementation of the Proposed Project could impact trees adjacent to the project site through trimming, and/or grading and excavation near the tree's root systems. Any work performed near street trees would be conducted in accordance with the City's tree ordinance. Because no trees are present on the project site and any work performed on the site would be in compliance with the City's tree ordinance the project could affect trees, this is considered a <i>less-than-significant impact</i>.</p>	LS	<p>7.8-2 Removal of street trees and heritage trees. (Project-specific)</p> <p>None required.</p>	LS

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.8-3 Loss of Swainson's Hawk habitat (nesting and foraging). (Project-specific)</p> <p>The Swainson's hawk nests primarily within riparian corridors in the Central Valley. However, the Swainson's hawk will also nest in isolated trees, trees along field borders or roads, small groves, or on the edges of remnant oak woodlands if they are located within flying distance (usually up to 5 miles) of suitable foraging habitat. The trees that are located immediately adjacent to the western boundary of the project site provide suitable nesting habitat for the Swainson's hawk. The project site mainly consists of a fallow field, and as such provides suitable foraging habitat for the Swainson's hawk, because this species typically forages for insects and small rodents in grasslands, fallow fields, livestock pastures, and low-growing croplands. There are approximately 25 Swainson's hawk nest sites within 5 miles of the project site</p> <p>Swainson's hawk is listed as a threatened species by the CDFG, and is protected under the provisions of the California Endangered Species Act (CESA) and the California Fish and Game Code (sections 3503 and 3511). Should the Proposed Project impact this species, the project applicant would have to demonstrate compliance with CESA. However, CESA only regulates "take" of individuals and does not address habitat loss that is not directly linked to the loss of individuals of State-listed species. Therefore, the loss of potential Swainson's hawk foraging habitat is addressed only as a CEQA issue, while the potential loss or disturbance of Swainson's hawk nest sites is a CEQA and CESA issue.</p>	<p>S</p>	<p>7.8-3 Loss of Swainson's Hawk habitat (nesting and foraging). (Project-specific)</p> <p>(a) <i>The project applicant/ developer shall comply with all requirements of the adopted Natomas Basin HCP and any additional mitigation measures identified in the Natomas Basin HCP EIR/EIS and conditions in the ITP; issued by USFWS and CDFG.</i></p> <p>(b) <i>Pre-construction surveys to determine whether any Swainson's Hawk nest sites occur on or within 1/2 mile of the lands designated for development.</i></p> <p>(c) <i>Timing restrictions for construction activity if an occupied Swainson's hawk nest is identified (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.</i></p> <p>(d) <i>An on-site biological monitor (CDFG-approved raptor biologist funded by the developer) would be assigned to the project if construction or other project-related activities that could cause nest abandonment or forced fledging are proposed within the 1/4 mile buffer zone.</i></p> <p>(e) <i>V alley 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.</i></p>	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>The Proposed Project would convert land that supports suitable foraging and nesting habitat for Swainson's hawk into urban uses through rough and finished grading; construction of buildings, roads, and placement of related infrastructure. Implementation of the Proposed Project would remove approximately 120 acres of suitable Swainson's hawk foraging habitat, and could remove suitable nesting trees that are immediately adjacent to the western boundary of the project site. Loss of foraging habitat for this species could result in indirect mortality of adults and juveniles due to increased foraging competition, and increased foraging costs. Implementation of the Proposed Project could also result in the disruption of nesting Swainson's hawks, if they are found to be nesting within trees that are along the western boundary of the project site.</p> <p>Removal of Swainson's hawk foraging habitat and potential disturbance of Swainson's hawk nest sites are considered <i>significant impacts</i>.</p> <p>7.8-4 Loss of foraging and nesting habitat for non-listed special-status avian species. (Project-specific)</p>		<p>(f) <i>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.</i></p> <p>(g) <i>Annually, prior to the Swainson's hawk nesting season (March 15 to September 15) and until build out of their Authorized Development has occurred, the City of Sacramento and Sutter County will notify each landowner of any property within the permit area(s) on which a Swainson's hawk nest tree is present, and will identify the nest tree, and alert the owner to the specific mitigation measures prohibiting the owner from removing the nest tree.</i></p>	
<p>The project site associated with implementation of the Proposed Project consists of open fallow and ruderal fields, and as such provide suitable foraging and nesting habitat for several non-listed, special-status avian species, including northern harrier, western burrowing owl, loggerhead shrike, tri-colored blackbird, and white-tailed kite. At least one of these species, the western burrowing owl, has been documented as nesting within the banks of the east Drain Canal, approximately 0.25 miles west of the project site.¹⁸ The direct loss or degradation of suitable foraging habitat or the removal of, or disturbance to nesting habitat within or directly adjacent to the project site(s) associated with implementation of the Proposed Project could result in the indirect mortality of these non-listed, special-status avian species or a reduction in local populations that depend on fallow fields and grasslands for foraging.</p>		<p>7.8-4 Loss of foraging or nesting habitat for non-listed special-status avian species. (Project-specific)</p> <p>(a) <i>Implement Mitigation Measures 7.8-3 (a).</i></p> <p>(b) <i>For the northern harrier, loggerhead shrike, tri-colored blackbird, and white-tailed kite:</i></p> <p><i>The project applicant shall retain a qualified biologist to conduct pre-construction (no earlier than 2 weeks prior to project construction activities) nest surveys within (1) the trees that are along the western and southern boundaries of the project sites, (2) any other trees that may be removed or damaged as a result of project construction or operation, (3) within suitable grassland nesting habitat for northern harrier, and (4) within suitable nesting habitat for tri-colored blackbird (e.g., within the blackberry thickets that are along the western boundary of the proposed project site). If active nests for any of these species are found, the nest sites shall be reported to CDFG. Removal of the nesting substrate that contains the nest(s) shall be</i></p>	

18 EIP Associates, unpublished data, January, 2000.

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>Although there are no specific agencies or permitting authorities that regulate impacts on non-listed avian species, the above special-status avian species can be considered rare or endangered in accordance with CEQA because, due to their designation as California Special Concern species (species that are vulnerable to extinction because of declining population levels, limited ranges, and/or continuing threats), they meet the criteria of CEQA Guidelines subsection 15380(b) (see page 7.8-4). Therefore, the mortality of, loss of nesting habitat, or loss of foraging habitat for these species would be considered a <i>significant impact</i>.</p>	<p>S</p>	<p>conducted in accordance with CDFG direction. At a minimum, removal of the nesting substrate shall be delayed until after a qualified biologist has determined that the chicks in the nest(s) have fledged. In addition, prior to fledging, a buffer zone (equipment exclusion zone) of at least 100 feet should be established around the nest(s) to avoid disturbance to active nest(s) during project construction. If no active nests are found, no mitigation would be required.</p> <p>OR</p> <p>In lieu of conducting pre-construction surveys, the project applicant shall ensure construction activities do not occur during the nesting season of these species (typically March 1 through July 31). If construction occurs during the non-nesting season, the species would not be impacted.</p> <p>(c) For the western burrowing owl: Mitigation shall include, but not be limited to, the following items as identified in the Natomas Basin HCP:</p> <ol style="list-style-type: none"> 1) Prior to project construction, the project applicant shall retain a qualified biologist to conduct pre-construction surveys of suitable habitat within the project sites within 30 days prior to project construction to document the presence and distribution of burrowing owls. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be re-surveyed. 2) Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFG verifies through noninvasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. 	<p>LS</p>

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.8-5 Loss of suitable habitat for giant garter snake. (Project-specific)</p> <p>The giant garter (GGS) snake is listed as a threatened species by CDFG and the USFWS and is protected under the provisions of the California and Federal Endangered Species Acts. This species is a highly aquatic snake, relying upon aquatic environments both for food and for shelter and escape from predators. Although no GGS were seen during the January 3, 2001 site visit of the Proposed Project site, the drainage canals and adjacent upland vegetation along the western and southern boundaries of the project site, provide marginally suitable habitat for GGS. The patches of vegetation along the margins of the canals provide adequate hibernation habitat and the banks of the canals provide suitable locations for basking. The USFWS typically considers all upland areas within 200 feet of aquatic giant garter snake habitat to be upland habitat for GGS. Implementation of the Proposed Project could result in the removal of suitable GGS aestivation habitat, which, in turn, could result in the incidental direct take of GGS (mechanical injury) and indirect take through habitat loss. Danger posed by construction activities is greatest during the winter dormant period (November through March) when these snakes are inactive below the ground and are unable to flee machinery. Loss of suitable habitat for the GGS and potential take of this species is considered to be a significant impact.</p>	S	<p>3) If nest sites are found, the USFWS and the CDFG shall be contacted regarding suitable mitigation measures, which may include a 300-foot buffer from the nest site during the breeding season (February 1 – August 31), or a relocation effort for the burrowing owls if the birds have not begun egg-laying and incubation or the juveniles from the occupied burrows are foraging independently and are capable of independent survival.</p> <p>4) If relocation of the owls is approved for the site by the USFWS and CDFG, the developer shall hire a qualified biologist to prepare a plan for relocating the owls to a suitable site.</p> <p>5) Where onsite avoidance is not possible, disturbance and/or destruction of burrows shall be offset through development of suitable habitation on Conservancy upland reserves.</p>	LS
<p>7.8-5 Loss of suitable habitat for giant garter snake. (Project-specific)</p>	S	<p>(a) Implement Mitigation Measures 7.8-3 (a).</p> <p>(b) Timing restrictions: No grading, excavating or filling activities will take place within 30 feet of existing giant garter snake habitat between October 1 and May 1, unless approved by CDFG. By conducting earth-moving activities during the summer months when snakes are active, it is expected that snakes in the construction area will be able to avoid construction equipment such that direct injury or mortality would be avoided. Further, snakes will not be in their winter retreats where they are vulnerable to injury during earth-moving activities.</p> <p>(c) Dewatering requirements: Dewatering of existing habitat will begin after November 1, but no later than April 1 of the following year. All water must be removed from existing habitat by April 15, or as soon thereafter as weather permits, and the habitat will be kept dry without any standing water for 15 consecutive days after April 15 and prior to excavating or filling the dewatered habitat. By dewatering habitat between November 1 and April 1, snakes would not be attracted to construction zones when they emerge from their winter retreats. If habitat must be dewatered after April 15, it must remain dry for 15 consecutive days prior to excavating or filling the habitat. Snakes have been found to leave habitat within a</p>	LS

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.8-6 Loss of biological resources. (Cumulative) Over the past 150 years, urban development has encroached upon and removed biological resources throughout the Central Valley, including wetlands, riparian vegetation, annual grasslands, and other habitats that support special-status species. The project site(s) supports small pockets of habitat, including suitable habitat for GGS, Swainson's hawk, and non-listed special status avian species. The project site(s) also supports potential jurisdictional waters of the United States and is adjacent to potential City of Sacramento heritage trees. Habitat values associated with the majority of habitats affected by this project are relatively low due to the proximity of urban uses, isolation and fragmentation, urban runoff, and invasion of non-native species. However, despite the relatively low values, many of these habitats are still used by special status species, and project impacts to these habitats and the species they support can be significant. As discussed in project impacts 7.8-1 through 7.8-5, construction of the Proposed Project would result in the loss and/or degradation of up to 126-acres of suitable foraging habitat for Swainson's hawk and non-listed special status avian species, suitable habitat for GGS, potential City of Sacramento heritage trees, and potential waters of the U.S. Impacts to these species and habitats can be fully mitigated at the project specific level to a level of less-than-significant. However, the Proposed Project's incremental contribution to cumulative impacts to these habitats and the species they support in the Sacramento region and throughout the Central Valley is considered a <i>significant cumulative impact</i>.</p>	S	<p>7.8-6 Loss of biological resources. (Cumulative) a) Implement Mitigation Measures 7.8-1(a) through (c); 7.8-2; 7.8-3 (a) through (g); 7.8-4 (a) through (c); and 7.8-5(a) through (c).</p>	SU
7.9 Cultural Resources			
<p>7.9-1 Historic resources. (Project-specific) There are no existing structures on the project site. As described under "Historical Background" above, no contributing element of the RD 1000 historic district is in the Proposed Project area. Construction of the Proposed Project would not result in the alteration or disturbance of historic resources, so <i>no impact</i> would occur.</p>	NI	<p>7.9-1 Historic resources. (Project-specific) None required.</p>	NA

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

TABLE 2-3

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<p>7.9-2 Archaeological resources. (Project-specific)</p> <p>No archaeological or prehistoric resources are known to exist in the project area. The only suggestion that there could be such resources, as yet unidentified, is the presence of isolated artifacts in the vicinity, as documented by Chavez. The Information Center, in the reply to the records search request, stated the following:</p> <p>Chavez noted two artifacts, however, one within the project (#9: Bowl Mortar) and another just outside (#6: Bowl Mortar rim fragment). This suggests the possibility that there was an early site somewhere in the local vicinity.</p> <p>This potential impact is the only one known for the Proposed Project area. A surface inspection can rarely be entirely certain that no buried archaeological or prehistoric resource is present within a project area. In the case of the Proposed Project, annual flooding prior to implementation of RD 1000 and agricultural practices since that time could have obscured surface evidence of an archeological site while leaving an intact or partially intact subsurface deposit. Therefore, this is considered a <i>potentially significant impact</i>.</p>	PS	<p>7.9-2 Archeological resources. (Project-specific)</p> <p><i>Should artifacts, exotic rock, bone, or a concentrated deposit of shell be uncovered during any future construction activities, an archaeologist shall be consulted for an on-the-spot evaluation. If bone is uncovered that appears to be human, the County Coroner shall be contacted. If the coroner determines that the bone is likely to be Native American in origin, then the Native American Heritage Commission shall be contacted to identify most likely descendants.</i></p>	LS
<p>7.9-3 Loss of historic or archeological resources. (Cumulative)</p> <p>Implementation of the Proposed Project would not result in the loss of historic resources because there are no existing historic structures on the site. As stated under Impact 7.9-2, no archeological resources are known to exist in the area. Because the potential presence of resources on the project site is small, implementation of the Proposed Project would result in a <i>less-than-significant cumulative impact</i>.</p>	LS	<p>7.9-3 Loss of historic or archeological resources. (Cumulative)</p> <p>None required.</p>	NA

S = Significant PS = Potentially Significant LS = Less than Significant SU = Significant and Unavoidable NI = No Impact NA = Not Applicable

3. RESPONSES TO COMMENTS



Arnold Schwarzenegger
Governor

LETTER 1



Jan Boel
Acting Director

STATE OF CALIFORNIA
Governor's Office of Planning and Research

January 29, 2004

Grace Hovey
City of Sacramento
1231 I Street, Room 300
Sacramento, CA 95814

Subject: Promenade at Natomas
SCH#: 2000072035

Dear Grace Hovey:

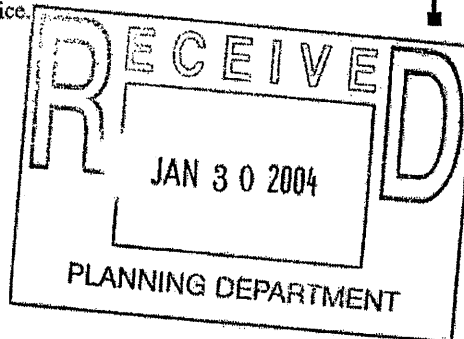
The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on January 28, 2004, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

1-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts
Director, State Clearinghouse



**Document Details Report
State Clearinghouse Data Base**

SCH# 2000072035
Project Title Promenade at Natomas
Lead Agency Sacramento, City of

Type EIR Draft EIR
Description The proposed project proposes to develop approximately 1,255,000 sf of retail and employment center uses on the 126.4 acre site.

Lead Agency Contact

Name Grace Hovey
Agency City of Sacramento
Phone 916 264-7601 **Fax**
email
Address 1231 I Street, Room 300
City Sacramento **State** CA **Zip** 95814

Project Location

County Sacramento
City Sacramento
Region
Cross Streets Truxel Road/I-80
Parcel No. 225-0160-086

Township	Range	Section	Base
-----------------	--------------	----------------	-------------

Proximity to:

Highways I-80, I-5
Airports
Railways
Waterways
Schools
Land Use Planned Unit Development; North Natomas Community Plan: light industrial, employment center.

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Drainage/Absorption; Economics/Jobs; Fiscal Impacts; Flood Plain/Flooding; Geologic/Seismic; Noise; Minerals; Population/Housing Balance; Public Services; Recreation/Parks; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Landuse; Cumulative Effects; Growth Inducing

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 2; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; Caltrans, District 3; California Highway Patrol; Regional Water Quality Control Bd., Region 5 (Sacramento); Native American Heritage Commission; State Lands Commission

Date Received 12/15/2003 **Start of Review** 12/15/2003 **End of Review** 01/28/2004

3.0 RESPONSES TO COMMENTS

COMMENT LETTER 1: State of California Governor's Office of Planning and Research

Response to Comment 1-1:

The comment is noted. No further response is required.

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

LETTER 2



*Flex your power!
Be energy efficient!*

February 2, 2004

04SAC0013
03SAC-80 PM 3.643/4.983
The Promenade at Natomas (Fong Ranch)
Recirculated DEIR (P00-033)
SCH# 2000072035

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 Promenade at Natomas project recirculated DEIR. Our further comments are as follows:

- Our comments in our letter dated June 2, 2003 (copy enclosed) are still valid regarding the feasibility of proposed mitigation measures to address significant impacts to Interstate 80 (I-80). At a minimum, the developer should provide a fair-share contribution toward a mitigation measure such as extending the Northgate Boulevard Interchange westbound offramp (Sacramento Area Council of Governments' Metropolitan Transportation Plan for 2025, Tier 1, Project SAC18700) and other westbound I-80/Northgate Boulevard offramp mitigation measures (for example, inductor loops and signal phasing) to mitigate lengthy traffic queues extending to the I-80 mainline.

2-1

If you have any questions regarding these comments, please contact Ken Champion at (916) 274-0615.

Sincerely,

JEFFREY PULVERMAN, Chief
Office of Regional Planning

c: Scott Morgan, State Clearinghouse

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!*

June 2, 2003

03SAC0040
 03-SAC 80 P.M. 4.983
 Promenade at Natomas/
 Sacramento Auto Loop Project DEIR
 AKA: Fong Ranch/Opus Retail (P00-033)
 SCH#2000072035

Ms. Grace Hovey
 City of Sacramento
 Planning Department
 1231-I Street, Suite 300
 Sacramento, CA 95814

Dear Ms.Hovey:

Thank you for the opportunity to review and comment on the Promenade at Natomas/Sacramento Auto Loop Project proposal. Our comments are as follows:

- Caltrans strongly supports land uses which support the proposed DNA light rail line. It should be clarified how this project supports and is consistent with the DNA project and Transit Oriented Development. 2-2
- We concur with the finding of a significant traffic impact on Interstate 80 east of the Northgate Boulevard Interchange, but disagree with the finding that the mitigation measure of adding an auxiliary lane between the Northgate Boulevard and Norwood Avenue Interchanges is infeasible. Caltrans has, in fact, completed a Project Study Report for improvements on Interstate 80, including the general area of the traffic study for the Sacramento Auto Loop Project. This report is the **Interstate 80 Project Study Report – Project Development Support (PSR-PDS), (03-Sac-80-EA 37970K, Median Lanes and Auxiliary Lanes, PM M0.00/M10.10, dated 6/25/02)**. The PSR included the proposed auxiliary lane as part of the preferred project alternative (estimated cost - \$7-9 million dollars). 2-3

A copy of the PSR is enclosed for your information. We request clarification as to the basis for the conclusion that this mitigation measure is not feasible. At a minimum, the developer should make a fair share contribution toward the auxiliary lane project.

- Caltrans has also completed a Project Report for the **Traffic Operations System Project, EA03-265-2A8300, STIP, 03-SAC-80 (PM 0.4/11.1), dated 10/22/02**, which provides information regarding the scope, schedule, and cost for the Interstate 80 Traffic Operations System (TOS) Project. A copy of the report is enclosed for your information. The Sacramento Auto Loop Project should contribute fair share funding to this TOS project proportionate to the additional traffic generated that use nearby Interstate 80 facilities. Our staff are available to assist with the identification of specific TOS project improvements applicable to reducing impacts for which there is a nexus to the Auto Loop Mall Project.
- The signalization of ramp interchange intersections should be re-phased and adjusted, as necessary, in coordination with any geometric improvements.

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

- c: Katie Shulte Joung, State Clearinghouse
- bc: John Holzhauser, Office of Traffic Operations – Sacramento
Bruce De Terra, Office of Regional & Transit Planning
Donna Berry, Program Project Management-Sac County North
Naghi Ghafari, Program Project Management-Landscape & Operations
Emerito De La Paz, Design South
Ali Lotfalian, Design S-12
Dennis Azevedo, Office of Travel Forecasting & Modeling
Mark-Yukyee Lo, Office of Travel Forecasting & Modeling
Steve Hetland, Special Funded Projects
Rebecca Covington, Sacramento County Regional Planning
Ken Champion, District 3 – Sacramento County LDR Coordinator

KC/ kc

COMMENT LETTER 2: California Department of Transportation - District 3**Response to Comment 2-1:**

The North Natomas Financing Plan and the related Nexus Study specify the North Natomas cost share for the lengthening of the Northgate Boulevard off-ramp specified in the comment. The Nexus study indicates this improvement is a “Regional” improvement, and the North Natomas Financing Plan does not require North Natomas developers to pay fees toward that improvement. However, the City may require a fair-share payment based on the difference between the trip generation associated with the Proposed Project compared to the trip generation that would have occurred with the land uses included in the current North Natomas Community plan.

Response to Comment 2-2:

Comment noted. The project has been designed to be consistent with the NNCP which encourages the placement of office uses within 1/8 to 1/4 of a mile of a proposed LRT stop.

Response to Comment 2-3:

As stated in the RDEIR, adding an auxiliary lane between Northgate Boulevard and Norwood Avenue is considered infeasible. The term “infeasible” is used to mean the cost of the improvement is in excess of what a single project can reasonably be expected to pay in relation to their contribution to the impact. Identification of a fair-share payment requires a description of the required improvements and an accurate estimate of their costs. Caltrans may not have this information. Since the City cannot control the actions of a State agency, the City cannot make occupancy of the Proposed Project contingent on Caltrans approval.

Response to Comment 2-4:

The comment refers to the “Traffic Systems Operations Project,” as a potential mitigation for the project’s impact to I-80 and suggests the developer be required to contribute their “fair-share” to offset the cost of implementing the traffic operations project. However, neither the nature of the improvements included nor is the estimated cost specified. Identification of a fair-share payment requires a description of the required improvements and an accurate estimate of their costs. Caltrans may not have this information. Since the City cannot control the actions of a State agency, the City cannot make occupancy of the Proposed Project contingent on Caltrans approval.

Response to Comment 2-5:

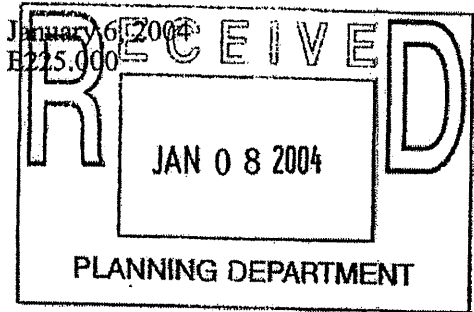
The comment is noted. The signalization of ramp intersections will be re-phased, as necessary.



LETTER 3

10545 Armstrong Avenue
Mather
California
95655
Tele: [916] 876-6000
Fax: [916] 876-6160
Website: www.csd-1.com

Grace Hovey
City of Sacramento Planning Division
1231 I Street, Room 300
Sacramento, CA 95814



Dear Ms. Hovey:

Subject: Application: Notice of Availability – Recirculated Draft Environmental Impact Report for The Promenade at Natomas Project Control No. P00-033

Board of Directors
County of Sacramento
Roger Dickinson
Illa Collin
Muriel P. Johnson
Roger Niello
Don Nottoli

City of Citrus Heights
Jeannie Bruins

City of Elk Grove
Sophia Scherman

City of Folsom
Kerri Howell

City of Rancho Cordova
Dave Roberts

City of Sacramento
Heather Fargo

Cheryl Creson
Agency Administrator
Robert F. Shanks
District Engineer
Marcia Maurer
Chief Financial Officer
Wendell H. Kido
District Manager
Mary K. Snyder
Collection Systems Manager

County Sanitation District 1 (CSD-1) and Sacramento Regional County Sanitation District (SRCSD) have reviewed the Notice of Availability (NOA) of the Draft Environmental Impact Report (DEIR) for the subject project. We expect that if the project is subject to currently established policies, ordinances, fees, and to conditions of approval that we proposed after review of entitlement application documents, then mitigation measures within the EIR will adequately address the sewage aspects of the project and we anticipate a less than significant impact to the sewage facilities.

3-1

As you can tell by rereading our application response letter dated November 10, 2003, CSD-1 anticipates the need for both trunk and collector sewer design and construction. Downstream sewer systems that will ultimately serve the project are not fully constructed. Interim sewer facilities may be required. An off-site lift station may be required to direct sewage to the existing trunk sewer on the east side of the East Drainage Canal until the future Upper Northwest Interceptor is completed on the west side of the East Drainage Canal.

3-2

The existing 18" diameter trunk sewer adjacent to the property along the north boundary is capacity constrained. The trunk sewer to be constructed is the portion of the Natomas Central Trunk Shed Project NNL line from Interstate 80 north to the north project boundary and then west to the future Upper Northwest Interceptor. This NNL line is depicted on CSD-1 Trunk Shed Plans. Alternative routes within the subject project site may be considered. A portion of the capacity to be provided in the new trunk sewer will be used to relieve existing capacity constraints south of Interstate 80.

3-3

If you have any questions regarding these comments, please call Joyce Ferguson at 876-6098 or myself at 876-6094.

Very truly yours,

Jeff Atteberry, P.E.
Application and Study Review

JA/JF:ds

cc: Christoph Dobson
Steve Hong

hovey010504.ltr

COMMENT LETTER 3: County Sanitation District - 1

Response to Comment 3-1:

Comment noted. The project applicant will comply with any existing policies, ordinances, or conditions of project approval, or pay any required fees.

Response to Comment 3-2:

Comment noted. The status of existing and proposed new wastewater infrastructure is discussed on page 7.5-14 of the RDEIR.

Response to Comment 3-3:

Comment noted. As discussed on page 7.5-14, the 18-inch sewer line is constrained and two lines are proposed as part of the CSD-1 Master Plan to address this issue.



Sacramento Regional
Transit District
A Public Transit Agency
and Equal Opportunity Employer

Mailing Address:
P.O. Box 2110
Sacramento, CA 95812-2110

Administrative Office:
1400 29th Street
Sacramento, CA 95816
(916) 321-2800
29th St. Light Rail Station/
Bus 36,38,50,67,68

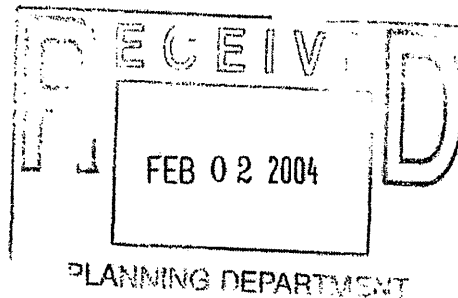
Light Rail Office:
2700 Academy Way
Sacramento, CA 95815
(916) 648-8400

Public Transit Since 1973

www.sacrt.com

January 28, 2004

Grace Hovey
CITY OF SACRAMENTO
Planning Division
1231 I Street, Room 300
Sacramento, CA 95814



DEVELOPMENT: Promenade at Natomas (Fong Ranch)

CONTROL NUMBER: P00-033

TYPE OF DOCUMENT: Recirculated Draft Environmental Impact Report.

Dear Ms. Hovey:

Regional Transit (RT) staff have reviewed the Recirculated Draft Environmental Impact Report for the proposed Promenade at Natomas (Fong Ranch) and would like to provide the following comments and recommendations:

The proposed development is located Northeast of Truxel Road and Interstate 80. Currently, RT bus routes #11, 13 and 14 operate along either Truxel Road or Gateway Park Boulevard, or both.

On December 15, 2003, the RT Board of Directors formally selected light rail as the transit mode and the Truxel Road alignment as the Locally Preferred Alternative (LPA) for the Downtown/Natomas/Airport (DNA) Corridor. The subject site is adjacent to the DNA LPA alignment. A proposed light rail station and bus transfer center is also planned just northeast of the Gateway Park Boulevard and Truxel Road intersection.

The Recirculated Draft Environmental Impact Report (RDEIR) did not mention the future light rail alignment that is being planned for the area. Traffic impacts on the surrounding intersections do not take into account the changes that will occur in the area when light rail is constructed. These cumulative impacts need to be addressed.

4-1

Regional Transit staff need to ensure that adequate area is available adjacent to Truxel Road for a light rail alignment along the east side of Truxel Road. Adequate property to accommodate the Locally Preferred

4-2

Alternative shall be provided in the form of an Irrevocable Offer of Dedication (IOD).

Transit stops, turnouts, shelters, etc. within the project need to be established. It is recommended that the applicant work with Mike Cassidy, Senior Planner, and other Regional Transit staff to identify future transit service and other facilities to support transit in the project area.

It is recommended that the applicant enter into an agreement with Regional Transit to provide park and ride spaces as close as possible to the light rail station.

Regarding the pedestrian circulation plan: pedestrian access to the intersection of Gateway Park Boulevard and Truxel Road needs to be enhanced with elements such as: landscaping, lighting, shading, pavers and other amenities.

The office buildings in Area 1 block an efficient pedestrian path from the center of the project to the future light rail station. Street pavers should be provided at appropriate intersections for pedestrians.

The 20,000 square foot building in Area 2 should be moved to allow better circulation between Areas 2 and 3.

Thank you for the opportunity to review this project. If you have questions regarding these comments and recommendations, please contact me at 321-2870 or tjaiyeoba@sacrt.com

Sincerely,



Taiwo Jaiyeoba
Real Estate Administrator

- c. Fred Arnold, Real Estate Manager, RT
- Don Smith, Senior Administrative Analyst, RT
- Mike Cassidy, Senior Planner, RT



COMMENT LETTER 4: Regional Transit

Response to Comment 4-1:

The locally preferred alternative alignment adopted by Regional Transit (RT) selected Truxel Road as the location of the rail alignment. However, the location of the rail line within or adjacent to Truxel Road has not yet been established. City staff has worked closely with RT to identify design and operation constraints for light rail as it crosses I-80. However, those discussions and the technical analyses necessary to determine where the rail line will be in relation to the roadway (i.e., within the road, on the east side or on the west side, etc.) are not complete. Therefore, the effects of light rail on surrounding intersections could not be studied for the proposed project because the exact alignment has not yet been finalized. Once the alignment for the future light rail project has been determined a separate environmental review would need to be conducted for the project at that time.

Response to Comment 4-2:

Comment noted. It is anticipated once the rail alignment is confirmed, RT will coordinate with the City and the project applicant to ensure adequate right-of-way is provided.

Response to Comment 4-3:

Comment noted. The PUD will be conditioned to provide pedestrian access throughout the project site.

Response to Comment 4-4:

Comment noted. The suggestion made by the commentor will be forwarded to the decision-makers and the project applicant for their consideration. It is anticipated that the project applicant and RT will enter into an agreement.

Response to Comment 4-5:

Comment noted. The PUD will be conditioned to provide pedestrian access throughout the project site.

Response to Comment 4-6:

Comment noted. The suggestion made by the commentor will be forwarded to the decision-makers and the project applicant for their consideration. The PUD will be conditioned to provide pedestrian access throughout the project site.

Response to Comment 4-7:

Comment noted.

TAYLOR & WILEY

A PROFESSIONAL CORPORATION

ATTORNEYS

2870 GATEWAY OAKS DR., SUITE 200

SACRAMENTO, CALIFORNIA 95833

TELEPHONE: (916) 929-5545

TELEFAX: (916) 929-0283

JOHN M. TAYLOR
 JAMES B. WILEY
 JESSE J. YANG
 DEREK P. COLE
 KATE A. LEARY
 JACK M. MULLIGAN

OF COUNSEL
 KATHLEEN R. MAKEL

February 2, 2004

Via Facsimile & Hand Delivery

Grace Hovey, Associate Planner
 Environmental Planning Services
 1231 "I" Street, Suite 300
 Sacramento, CA 95814

Re: Comments on Promenade at Natomas Recirculated Draft
 Environmental Impact Report (SCH # 2000072035)

Dear Ms. Hovey:

We are pleased to provide you, on behalf of the applicant, Opus West, with the following comments on the Recirculated Draft Environmental Impact Report for the Promenade at Natomas project. These comments are in page order. If a comment is applicable to more than one page, then this letter references all pages where such comment is applicable.

Page 1-1	In the first paragraph, first sentence, change "Natomas Promenade project" to "Promenade at Natomas project."	5-1
Page 2-2	In the last sentence of the first paragraph, footnote 3 should be placed after "SC-PUD," not "EC-50 PUD."	5-2
Page 2-11	In Table 2-3, under the heading "Freeways," the word "Project" should be added to the end of the third paragraph (i.e., "The following discussion addresses significant impacts of the Proposed <u>Project</u> .")	5-3
Page 2-17 to -19	In Table 2-3, the "Level of Significance After Mitigation" is not identified for four impacts, specifically: (f) North Market/Northgate; (g) Truxel Road/Gateway Park; (h) Truxel Road/I-80 west ramps; and (j) Northgate/I-80 east ramps.	5-4
Page 3-7	In the last sentence of the section entitled "Wastewater," change the word "City" to "County."	5-5
Page 3-10	Under the section entitled "Project Schedule," the description of the timing of construction is incorrect. Currently, the sentence reads: "It is anticipated that	5-6

construction for the project would commence in the late spring early summer of 2003." This language should be revised to read: "...construction for the project would commence in summer 2004."

- | | | |
|------------------|--|------|
| Page 4-21 to -25 | In the analysis of Alternative 3, language should be added to address the fact that, under this alternative, the offices are not near the proposed light rail station and that, therefore, transit would be less accessible to employees. | 5-7 |
| Page 4-25 | The first sentence of the third paragraph states that "[t]he total ridership (on a weekly basis) for [Alternative 3] would be 2.8 times the ridership for the <u>current zoning</u> ." The ridership under this alternative should have been compared to the ridership under the site's North Natomas Community Plan designation, not the current zoning. | 5-8 |
| Page 4-35 | The discussion of Alternative 4 should be updated to reflect recent planning activity by the City of West Sacramento. Specifically, in the fourth paragraph under the heading "Alternative 4: Offsite - Reed Avenue," it should be noted that both the general plan and zoning designation were changed from "General Commercial" to "Community Commercial" in December 2003. Additionally, the discussion of Alternative 4 should note the existence of retail and office buildings on this site. | 5-9 |
| Page 5.1-9 | The first sentence of the second full paragraph should be changed to read: "Planned adjacent uses include two (2) proposed restaurants immediately to the west of the project site in a small triangle of land,...." | 5-10 |
| Page 5.1-12 | In the second and third sentences of the last paragraph, the term "Natomas Village Center Design Guidelines" should be changed to "Promenade at Natomas Design Guidelines." | 5-11 |
| Page 5.2-6 | The last sentence of the third paragraph should read "...and usually carry merchandise that does not directly compete with the smaller <u>chain</u> retailers that are in malls." | 5-12 |
| Page 6-7 | The last sentence of the first paragraph should be changed to read: "Potential businesses under the proposed land uses could include office and regional retail." | 5-13 |
| | Under the section entitled "Population and Housing" in the last sentence of the first paragraph, the word "Project" should be inserted after the word "Proposed." | 5-14 |

Page 6-8	Under the section entitled "County," the jobs/housing balance is listed as 630,962/546,288 or <u>1.15 percent</u> . This is incorrect. The actual percentage should be <u>115%</u> .	5-15
Page 6-9	Under the section entitled "NNCP," the third sentence of the second paragraph should be amended to read: "Therefore, development of the Proposed Project would result in the same jobs/housing balance."	5-16
	In the last two paragraphs the numbers used to calculate the jobs/housing ratios do not correspond with the figures listed in Table 6-4. These paragraphs should be revised accordingly.	5-17
Page 7.2-9	The fourth paragraph should be amended to reflect the fact that the I-5/Arena Boulevard interchange is now complete.	5-18
	Under the section entitled "Existing Traffic Volumes," the DEIR states that traffic volumes were counted at the study intersections during the a.m. and p.m. commuter periods and on Saturday between <u>1:00 a.m.</u> and 3:00 p.m. This should probably read " <u>1:00 p.m.</u> and 3:00 p.m." Also, the first sentence should be revised to reflect that the traffic counts were conducted in <u>March 2002</u> and not Spring of 2001.	5-19
Page 7.2-23	First paragraph should be revised to reflect the fact that the I-5/Arena Boulevard interchange is now complete.	5-20
Page 7.2-44	Section (a), entitled "Del Paso Road/National Drive," should begin with a discussion of the level of service and the level of impact after mitigation.	5-21
Page 7.8-12	Under the section entitled "Local/City of Sacramento General Plan," the second full sentence should read "The following City of Sacramento General <u>Plan</u> policies...."	5-22
Page 7.8-15	The section entitled "City of West Sacramento Tree Ordinance" is not applicable to the proposed project and instead belongs in the discussion of Off-Site Alternative (Chapter 4, pgs. 4-35 to 4-51).	5-23

Grace Hovey
February 2, 2004
Page 4

Please feel free to contact us if you have any questions regarding our comments.

Very truly yours,



James B. Wiley



Kate A. Leary

JBW/kal

Cc: Don Little, OPUS WEST
Jeff Smith, OPUS WEST
John Taylor

COMMENT LETTER 5: James B. Wiley and Kate A. Leary, Taylor & Wiley

Response to Comment 5-1:

The first sentence on page 1-1 of the RDEIR is revised to read as follows:

This recirculated Draft Environmental Impact Report (RDEIR) is prepared at the request of the City of Sacramento in response to changed conditions relating to the development of the Promenade at Natomas ~~Promenade~~ project (formerly the Promenade at Natomas/Sacramento Auto Loop project).

Response to Comment 5-2:

The footnote reference in the last sentence in the first paragraph on page 2-2 is revised to read as follows:

The applicant is also seeking to rezone the site from A-PUD to EC-50 PUD³ and SC-PUD.³

Response to Comment 5-3:

Table 2-3 on page 2-11 is revised to read as follows:

The following discussion addresses significant impacts of the Proposed Project.

Response to Comment 5-4:

It is not clear what the commentor is requesting. In Table 2-3, pages 2-17 through 2-19, the level of significance after mitigation is clearly identified for the four impacts listed by the commentor. Please see the impacts from Table 2-3 listed below.

(f) North Market Boulevard/Northgate Boulevard (#9)

This mitigation measure would not improve the level of service in comparison to the level of service without the project. The mitigation measure would reduce delay at the intersection during congested periods below the delay that would occur without the project. However, because it may not be feasible to add lanes in this location, the impact of the project after mitigation would be *significant and unavoidable*.

(g) Truxel Road/Gateway Park Boulevard (#11)

Delays at this intersection would be higher after mitigation than with no project and no mitigation. Therefore, this impact would remain *significant and unavoidable*.

(h) Truxel Road/I-80 West Ramps (#13)

No feasible mitigation measures were identified; therefore, this impact would remain *significant and unavoidable*.

(j) Northgate Boulevard/I-80 East Ramps (#16)

No feasible mitigation measures were identified for this intersection. If the Northgate Boulevard bridge structure across I-80 were widened to add one lane to the southbound Northgate Boulevard approach, resulting in one through lane, one combination through-right turn lane, and one right turn lane, the level of service would be improved from LOS F to LOS E during p.m. peak hour conditions – better than the LOS F conditions that would occur without the project. This modification would not be feasible; therefore, the impact would be *significant and unavoidable*.

Response to Comment 5-5:

The last sentence in the fourth paragraph on page 3-7 is revised to read as follows:

In the future the City County is proposing to remove the temporary lift station and relocate the Northwest interceptor pipeline to the west side of the drainage canal.

Response to Comment 5-6:

The first sentence under Project Schedule on page 3-10 is revised to read as follows:

It is anticipated that construction for the project would commence in the late spring early summer of 2003~~4~~.

Response to Comment 5-7:

The following sentence is added to the bottom of page 4-21:

However, because this alternative encourages the development of a mix of regional retail and office uses it appears to be considered generally consistent with the intent of the applicable goals and policies set forth in the General Plan that encourage the development of these uses and in a location that would encourage light rail ridership. However, because the office uses are located in the northernmost portion of the site access to the proposed light rail stop would not be as convenient or accessible for these employees.

The following text is added after the second paragraph on 4-24:

As shown on Figure 4-2, the proposed office uses are located in the northern portion of the site not adjacent to the proposed light rail stop. Therefore, light rail transit would be less accessible and convenient for these employees.

Response to Comment 5-8:

The term “current zoning” was intended to signify Alternative B: No Project/Community Plan Buildout (AB) as defined in the April 2003 DEIR. The second and third paragraphs on page 4-25 are revised to read as follows:

The Retail/Mixed Use Alternative would generate approximately ~~70~~ 100 transit riders during the a.m. peak and about ~~180~~ 210 during the p.m. peak. The p.m. peak hour demand for transit services would exceed the capacity of the transit system. Therefore, this would be considered a significant impact.

The total ridership (on a weekly basis) for this alternative would be ~~2.8~~ three times the ridership for the current zoning, which is consistent with the North Natomas Community Plan. This alternative would generate about ~~40~~ 2 fewer riders than the current zoning during the a.m. peak hour, but would generate 52 more riders during the p.m. peak hour. Saturday ridership would increase by ~~214~~ 222 over the current zoning.

Response to Comment 5-9:

The first sentence in the third paragraph on page 4-35 is revised to read as follows:

The project site consists of undeveloped fields, and a few buildings that include retail and office uses, a drainage canal, and several mature trees.

The third sentence in the fourth paragraph on page 4-35 is revised to read as follows:

In December 2003, the City of West Sacramento amended the General Plan designation and zoning for the area from ~~This site is zoned and designated for General Commercial uses under the West Sacramento General Plan to Community Commercial uses.~~

Response to Comment 5-10:

The first sentence in the second full paragraph on page 5.1-9 is revised to read as follows:

Planned adjacent uses include ~~a proposed gas station and fast food establishment~~ two proposed restaurants immediately to west of the project site in a small triangle of land, and an office/ retail project is also proposed west of the project site across Gateway Boulevard.

Response to Comment 5-11:

The third and fourth sentences of the last paragraph on page 5.1-12 are revised to read as follows:

As discussed in the Initial Study (see Appendix B) it is assumed the project will comply with the ~~Natomas Village Center~~ Promenade at Natomas Design Guidelines. The ~~Natomas Village Center~~ Promenade at Natomas Design Guidelines specify types of landscaping, architectural styles and details, and appropriate signage and lighting.

Response to Comment 5-12:

The last sentence in the third paragraph on page 5.2-6 is revised to read as follows:

This type of retail use would attract a larger regional market but would not compete with the shopping opportunities provided at Downtown Plaza, Arden Fair Mall, or the Roseville Galleria because the big box retailers do not locate in malls and usually carry merchandise that does not directly compete with the smaller ~~retail~~ chain retailers that are in malls.

Response to Comment 5-13:

The last sentence under Table 6-3 on page 6-7 is revised to read as follows:

Potential businesses under the proposed land uses could include offices; ~~high-tech uses; medical, educational, and child care facilities; and support services such as~~ and regional retail.

Response to Comment 5-14:

The last sentence in the first paragraph on page 6-7 under Population and Housing is revised to read as follows:

Therefore, the Proposed Project would not directly affect the population or housing stock within the NNCP area.

Response to Comment 5-15:

The information provided on page 6-8 relating to the jobs-housing balance within the County of 1.15% is correct. No further revisions are required.

Response to Comment 5-16:

The third sentence in the second paragraph under NCCP on page 6-9 is revised to read as follows:

Therefore, development of ~~Scenario A would result in the same jobs/housing balance and Scenario B~~ the Proposed Project would slightly decrease the jobs-housing balance for the entire NNCP area.

Response to Comment 5-17:

The third paragraph under NNCP on page 6-9 is revised to read as follows:

As shown in Table 6-2, ~~At~~ buildout of the portion of the NNCP area within the City, it is anticipated that the proposed land uses would generate 29,898 dwelling units and approximately 40,362 housed workers (29,898 x 1.35) and 57,342 jobs,¹ resulting in a jobs-housing balance of 70.4 percent (40,362/57,342) for the portion of the NNCP within the City. Under the Proposed Project, the additional 580 jobs proposed by the project would result in a jobs-housing balance of 70 percent (40,362/57,922) for the City portion of the NNCP. Therefore, development of the Proposed Project would increase the job-housing balance for the portion of the

1 City of Sacramento, North Natomas Community Plan, amended April 16, 1996, page 11.

NNCP area within the City. This would indicate more workers would commute into the City-portion of the NNCP area, but less than under buildout of the NNCP area within the City's current General Plan designations.

Response to Comment 5-18:

The fourth sentence in the fourth paragraph on page 7.2-9 is revised to read as follows:

~~An interchange at Arena Boulevard and I-5 is under construction and is anticipated to be operational in November 2003~~ has recently been completed and is now operational.

Response to Comment 5-19:

The traffic counts were conducted in the Spring of 2001, not March 2002.

The first sentence in the last paragraph under Existing Traffic Volumes on page 7.2-9 is revised to read as follows:

Turning traffic volumes were counted at the study intersections during the a.m. and p.m. commuter periods (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) and on Saturday between 1:00 a.p.m. and 3:00 p.m. during Spring 2001.

Response to Comment 5-20:

The second sentence in the first paragraph on page 7.2-23 is revised to read as follows:

~~This interchange is currently under construction and on line to be completed by November 2003 and~~ ~~the trip distribution for the analysis of the Proposed Project under cumulative conditions reflects the presence of~~ includes the I-5/Arena Boulevard interchange.

Response to Comment 5-21:

The following text is added under Mitigation Measure 7.2-8 (a) Del Paso Road/National Drive (#2) discussion on page 7.2-44:

This mitigation measure would reduce the impact to a *less-than-significant level*.

Response to Comment 5-22:

The footnote reference in the second sentence under City of Sacramento General Plan on page 7.8-12 is revised include a superscript:

The following City of Sacramento General Plan⁷ policies will guide the conservation and protection of biological resources in regards to the Proposed Project:

Response to Comment 5-23:

The first paragraph on page 7.8-15 is moved to page 4-35 under the discussion for Alternative 4.



LSA ASSOCIATES, INC.
30 EXECUTIVE PARK, SUITE 200
IRVINE, CALIFORNIA 92614-4731

949-553-0666 TEL
949-553-8076 FAX

BERKELEY
FT. RICHMOND
FT. COLLINS

RIVERSIDE
ROCKLIN
SAN LUIS OBISPO

February 2, 2004

Grace Hovey
City of Sacramento, Department of Planning & Building
Environmental Planning Services
1231 I Street, Room 300
Sacramento, CA 95814

Subject: Comments on Recirculated DEIR for Promenade at Natomas Project (POO-033)

Dear Ms. Hovey:

These comments pertain to Chapter 7.2, Transportation and Circulation.

1. Page 7.2-9. The existing conditions are noted as July 10, 2000. This, unfortunately, is substantially out of date, and prior to the recent major changes to the Marketplace entrance. More importantly, the existing conditions are prior to the opening of the new interchange at Arena and I-5.

6-1

2. The recommended mitigation measures at the Truxel/Gateway/Marketplace intersection are out of date. The first measure, a) convert the previous four-lane approach from the Marketplace to a left, through/left and two rights, was not acceptable to the City when proposed by Natomas Marketplace. They were required to build two exclusive lefts, one through and two rights (five-lane approach). The second measure, (b), is to provide a right-turn overlap (i.e., a right-turn arrow) for traffic exiting the Marketplace while traffic is making a left turn from Truxel into the Marketplace. This also was already recommended and may be implemented. The main issue for this was the need to prohibit U-turns from northbound Truxel which Caltrans may not have been supportive of.

6-2

3. The traffic counts are significantly out of date and have changed due to the new interchange.

6-3

4. The City is aware that some of the mitigation recommendations have either already been implemented by Natomas Marketplace or have been denied by the City.

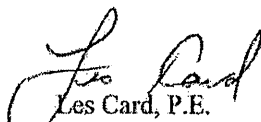
6-4

5. Another alternative mitigation measure (for the Truxel/Marketplace intersection), such as a new signal at the northern entrance to the Marketplace allowing left turns in and out of Natomas Marketplace, should be evaluated to mitigate impacts of the Truxel/Gateway/Marketplace intersection.

6-5

Sincerely,

LSA ASSOCIATES, INC.


Les Card, P.E.
Principal and CEO

02/02/04«P:\DSR630\Letter.doc»

COMMENT LETTER 6: Les Card, LSA**Response to Comment 6-1:**

Existing conditions should have been identified for Spring 2001, which was prior to the changes to the Natomas Marketplace entrance. The exit from the Marketplace currently features two left-turn lanes, one through lane, and two right-turn lanes – a five-lane approach. The RDEIR showed a four-lane approach for existing conditions. If the RDEIR showed the five-lane approach, the delay would be less than shown for all analysis scenarios. This change would not result in the addition or elimination of project-specific or cumulative significant impacts at the intersection nor would it change the mitigation measures.

The Arena Boulevard interchange was not open at the time the Notice of Preparation was prepared and circulated for this project. Although the project-specific analysis did not assume the Arena Boulevard interchange would be in place, this assumption would not change the significance of project-specific impacts nor mitigation measures. The analysis of cumulative conditions assumed the Arena Boulevard interchange would be in place.

Response to Comment 6-2:

Please see Response to Comment 6-1 regarding the current lane configuration/intersection at Natomas Marketplace.

If a right-turn overlap is not installed for traffic exiting the Natomas Marketplace, the findings of the RDEIR would not be significantly affected. Although there would be a higher delay at the intersection, the essential findings of the RDEIR would remain the same – there would be a less-than-significant project-specific impact at this intersection and a significant and unavoidable cumulative impact. The mitigation measures would be the same except for the right-turn overlap for traffic exiting the Marketplace, and the impact after mitigation would remain the same, less than significant for the project-specific impact and significant and unavoidable for the cumulative impact.

Response to Comment 6-3:

Please see Response to Comment 6-1.

Response to Comment 6-4:

Comment noted.

Response to Comment 6-5:

The city is considering the placement of a traffic signal at the location indicated. However, the effectiveness of that signal at decreasing delay at the Gateway Park/Truxel Road intersection has not been verified. The effect of the mitigation measures noted in the RDEIR is verifiable.

February 2, 2004

Grace Hovey
City of Sacramento, Department of Planning And Building
1231 I Street, Room 300
Sacramento, CA 95814

RE: Promenade at Natomas Recirculated Draft EIR

Dear Ms. Hovey:

Conspicuously absent from the transportation analysis in *7.2 Transportation/Circulation* is the intersection of Truxel Road and Natomas Crossing Drive. This intersection provides the primary access to the homes in Natomas Crossing. The traffic impact of the Proposed Project on this intersection was not addressed in the Promenade at Natomas/Sacramento Auto Loop DEIR nor has it been addressed in the Recirculated DEIR. Omission of this intersection from the traffic analysis will not allow evaluation of the impacts to and mitigation for the traffic circulation within Natomas Crossing and at the intersection of Truxel Road and Natomas Crossing Drive. Errors contained in the original DEIR should not be carried over to the Recirculated DEIR.

7-1

The extension of National Drive is proposed to lessen identified impacts. Table 7.2-25, which is cited as comparing the levels of service with and without the National Drive extension, is missing and should be included.

7-2

Christopher V. Holm
8 McKilt Ct.
Sacramento, CA 95835



COMMENT LETTER 7: Christopher V. Holm**Response to Comment 7-1:**

The intersections that were analyzed in the Promenade at Natomas RDEIR were selected for study based upon the anticipated volume and distributional patterns of project traffic and known locations of operational difficulty. The intersection of Truxel Road and Natomas Crossing Drive was not selected for study for two reasons. First, the distribution of project traffic would not affect that intersection as much as others selected for the study. The predominant pathways for project traffic to and from north Truxel Road would be via Arena Boulevard and Gateway Park Boulevard. The predominant pathway for project traffic to and from south Truxel Road would be via the Truxel Road interchange and Gateway Park Boulevard. Neither route would pass by Natomas Crossing Drive. The second reason Natomas Crossing Drive was not selected to study was that the intersection was not a known location of traffic operational difficulty and the intersection is expected to have adequate capacity to accommodate future traffic.

Response to Comment 7-2:

The commentor is correct, Table 7.2-25 on page 7.2-70 in the prior EIR was not included in the RDEIR. This was an error. Table 7.2-25 has been re-numbered as Table 7.2-20 and included on page 7.2-50 of the RDEIR.

The text on page 7.2-47 has been revised to read as follows and Table 7.2-20 is included:

I-80 mainline operating conditions associated with the cumulative scenario are summarized in Tables 7.2-18, ~~and 7.2-19,~~ and 7.2-20,

TABLE 7.2-20

PROPOSED PROJECT (PPB) WITH AND WITHOUT NATIONAL DRIVE EXTENSION

Intersection	Control	AM Peak Hour			PM Peak Hour			Saturday Peak Hour			
		Without Extension		With Extension	Without Extension		With Extension	Without Extension		With Extension	
		LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
Del Paso Rd. / Gateway Park Blvd.	Signal	D	39.1	D	39.1	C	24.6	B	19.9	B	19.9
Del Paso Rd. / National Dr.	Signal	D	45.4	D	45.5	F	97.8	F	98.9	C	23.1
Northgate Blvd. / Del Paso Rd.	4-Way Stop	F	504.3	F	504.0	F	847.9	F	852.8	F	70.4
Truxel Rd. / Arena Blvd.	Signal	F	207.4	F	207.4	F	230.8	F	230.7	D	38.5
Arena Blvd. / Gateway Park Blvd.	Signal	E	56.1	E	56.1	D	47.8	D	47.8	D	39.4
N. Market Blvd. / Sierra Point Dr.	Stop Sign	C	22.0	C	24.9	F	101.6	F	112.2	D	34.9
N. Market Blvd. / National Dr.	Signal	F	143.9	F	242.6	F	343.8	F	429.7	B	19.5
N. Market Blvd. / N. Freeway Blvd.	Stop Sign	A	2.8	A	1.0	F	166.5	C	20.5	A	3.0
N. Market Blvd. / Northgate Blvd.	Signal	F	166.7	F	167.0	E	98.7	F	96.5	B	20.0
Gateway Park Blvd. / Raley's Dr.	Stop Sign	A	0.3	A	0.3	A	0.4	A	0.4	A	0.1
Truxel Rd. / Gateway Park Blvd.	Signal	F	81.6	F	81.6	F	201.9	F	201.9	F	196.9
Lennane Dr. / N. Freeway	Stop Sign	A	4.4	A	4.9	A	4.8	A	3.8	A	3.8
Truxel Rd. / I-80 West Ramps	Signal	D	42.8	D	42.8	D	38.7	D	38.7	E	71.3
Truxel Rd. / I-80 East Ramps	Signal	C	27.7	C	27.7	F	82.1	F	82.1	C	32.5
Northgate Blvd. / I-80 West Ramps	Signal	B	17.5	B	17.5	C	32.0	C	32.0	A	8.3
Northgate Blvd. / I-80 East Ramps	Signal	F	92.2	F	92.2	F	133.3	F	133.3	B	18.0
Truxel Rd. / San Juan Rd.	Signal	F	134.3	F	134.3	E	63.4	E	63.4	E	58.0
Northgate Blvd. / San Juan Rd.	Signal	D	47.0	D	47.0	F	83.8	F	83.8	C	32.4
Gateway Park Blvd. / N. Freeway Blvd.	Signal	C	28.2	C	22.1	D	49.7	D	47.8	F	101.6
N. Freeway Blvd. / West Access	Signal	C	23.1	C	23.8	E	68.0	D	52.8	F	117.6
N. Freeway Blvd. / Middle Access	Stop Sign	A	6.6	A	4.1	F	89.1	A	9.9	B	13.0
N. Freeway Blvd. / East Access	Stop Sign	A	0.6	A	1.0	A	2.7	A	2.5	A	4.0

¹ LOS = Level of Service

² Weighted average control delay in seconds

Note: Significant impacts are shaded.

SOURCE: Dowling Associates, Inc., 2002.

LETTER 8

From: S Day <smdayucd@yahoo.com>
To: <ghovey@cityofsacramento.org>
Date: 2/2/04 3:20PM
Subject: Promenade at Natomas Comments

Ms Hovey -

Unfortunately, I didn't receive a copy of the Recirculated Draft EIR for the Promenade at Natomas project until last week. As you can imagine, it's a difficult document to wade through quickly! In any event, I have several comments regarding the project. I should also like to add that after talking with several of my neighbors, many of us share these same views.

1.) The intersection of Truxel and Gateway Park Blvd. is already an unbelievable mess at peak traffic times and will only get worse with the additional traffic from this project. It is therefore critical that additional traffic access be available on the east side of this project. I understand that some of this land is currently in the hands of the county. Development of the roads on the east side of this project are essential to avoid future gridlock in the Truxel corridor and should be made a part of this project.

8-1

2.) To encourage pedestrian and bicycle traffic, it is important to plan safe access for both. The Natomas Marketplace is not friendly to bikes or pedestrians. This new development should strive to do better. A pedestrian and bike friendly bridge over Interstate 80 is essential to provide alternatives to driving your car to visit this area. Safe alternatives do not currently exist.

8-2

Thank you for your time and for the opportunity to comment on this proposal. I would greatly appreciate more timely notification in the future regarding such important projects in the Natomas area.

Best Regards,

Suzanne Day
3624 Innovator Drive
Sacto., Ca 95834

Do you Yahoo!?
Yahoo! SiteBuilder - Free web site building tool. Try it!
<http://webhosting.yahoo.com/ps/sb/>



COMMENT LETTER 8: Suzanne Day

Response to Comment 8-1:

Roadway expansions on the east side of the project site were specified in the cumulative mitigation measures, as discussed on pages 7.2-44 through 7.2-46. Additional lanes are called for on Del Paso Road at National Drive and Northgate Boulevard, on North Market Boulevard at National Drive and east of Northgate Boulevard, on National Drive at Del Paso Road and North Market Boulevard, and on Northgate Boulevard at North Market Boulevard and Del Paso Road. In addition, these streets are currently under the jurisdiction of the county.

Response to Comment 8-2:

The 2010 Bikeway Master Plan includes an off-street bike crossing over I-80 in the area of the project site. Funding of this structure is beyond the scope of this project. Due to the potential cost of the project, State or federal transportation grants will likely be required to build the project.